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Contents

Finnish University Students' Views of the Strengths of Foreign Language Courses

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Abstract—Compared with younger language learners, adult learners are assumed to have greater difficulty with language learning, for instance, in reaching native-like proficiency. Most studies in the area of second language acquisition and foreign language education have focused on younger learners, with the research on adult language learning being very limited. Through an analysis of previous studies on adult language learning and small-scale empirical research, this article examines students' views of the strengths and good practices of foreign language courses in university language courses other than English. The questionnaire data collected from university students (N = 53) learning French, German and Italian as L3/L4 at the language centre of a Finnish university were analysed in a qualitative and quantitative way. The strongest evidence from our study was the indispensable role of teachers in university language courses. The analysis results indicate a mismatch between teacher-led and student-centred pedagogy. On the one hand, adult learners seemed to need strong guidance from the teacher, yet on the other hand, the best practices in the courses were those activities in which the adult learners could produce the target language in interactions with their peers. Finally, the factors that enhance adult language learning in higher education are reflected upon.

Index Terms—adult language learning, higher education, language course, languages other than English, language learning methods

I. INTRODUCTION

Adult learning is generally an interdisciplinary field of study based on diverse theories and approaches (Elias & Merriam, 2005). The area of second/foreign language (SL/FL) teaching and learning has focused on language learning by children and young adolescent learners (Ramírez Gómez, 2016, p. 201). The literature on adult SL/FL education is not very coherent because studies are often context-specific, and their findings cannot be generalised to other contexts (Murray, 2005). Generally, prior experiences of adult language learners have an influence on their language learning process both positively and negatively. Many studies have indicated that learners who have their first experiences with a language in early childhood seem to be able to 'achieve normal language acquisition while those who begin later come nowhere near native ultimate attainment' (Ioup, 2005, p. 420). Several studies have demonstrated that the ability to learn a second language gradually declines as a person ages (Bialystok & Miller, 1999; Birdsong, 2014). Although children may be better at language *acquisition* than adults, this does not necessarily mean that adults would be worse language *learners*. It is true that along with age, adult learners lose the language-learning skills they once possessed in their childhood. Accordingly, as a person ages, it becomes increasingly difficult for them to achieve native-like competence in a foreign language. Hence, age is often considered a barrier to language learning. However, in a few areas of language learning, adult learners have certain strengths, for instance, in the use of language learning strategies (Oxford & Ehrman, 1990) or in learning morphology and grammar (Krashen et al., 1979; Long, 2005).

Based on the questionnaire data collected from students enrolled in language courses other than English at the language centre of a Finnish university, the aim of this study is to determine the strengths of a language course for adult learners and identify beneficial classroom practices. First, we discuss the findings of previous studies on characteristics of adult language learners. Second, we focus on the literature related to teaching methods used in adult language learning. Third, based on our findings, we examine the strengths of language courses as reported by adult learners. Finally, we reflect on the factors that enhance adult language learning and provide implications for the development of adult language courses in higher education. The outcomes of this study can help with the planning of future FL courses in higher education, as well as with the development of language curricula and courses.

II. THEORETICAL BACKGROUND

A. Characteristics of Adult Language Learners

As stated above, the literature has generally focused more on young learners than on adult learners. In terms of the age of language learners, we cannot avoid discussing the critical period hypothesis (CPH, introduced by Lenneberg 1967) that has affected the debate on the influence of age in language learning tremendously. CPH has especially guided the research on L2 acquisition (Long, 2005). Generally, according to CPH, late learners are less likely to reach native-like proficiency in a language than those who start early, preferably before puberty. In the 1960s, Lenneberg

(1967) concluded that brain plasticity is lost in puberty, meaning that the so-called brain fossilisation occurs, that is, a learner's linguistic development ceases. Since then, the theory of brain fossilisation has been questioned (Guglielman, 2012). The literature contains contradictory reports related to the existence of the critical period. On the one hand, the results of a few studies have indicated that the critical period does not exist (Hakuta et al., 2003; Birdsong, 2014), on the other hand, some studies have reported the negative effect of age on language learning (DeKeyser et al., 2010; DeKeyser, 2013). In addition to the debate surrounding the existence of the critical period, there are diverse opinions and research findings related to its closure. In her overview, Nikolov (2009, p. 3) concluded that there seems to be no 'sharp drop at a certain age in SLA, but a gradual decline across the lifespan'. In his review article, Ioup (2005) reported the existence of multiple critical periods. Because the term critical period has attracted controversy, the term sensitive period, which assumes a gradual decline in ability, has been suggested as being more appropriate. There are even more divergent research findings pertaining to the critical period in L2 learning than those in L1 learning (Ioup, 2005).

In the literature, the general consensus is that implicit linguistic competences in particular (e.g., native-like accent) are mostly affected by the age of a learner (Long, 2005). Long (2005) concluded that a native-like accent can be attained when the first exposure to a language occurs before the ages of 6 or 12 years. According to him, the sensitive period for lexical abilities, as well as for morphology and syntax, ends later in the mid-teens. However, he did state that an early start in language acquisition does not always guarantee a native-like accent. According to other studies (Nikolov, 2009), exceptional adults are able to reach native-like proficiency, including a native-like accent. Adults are usually considered to learn better with explicit instruction (Paradis, 2009).

However, a few areas of language learning are not affected by age to a great extent, especially those in which late learners can rely on explicit learning. Granena and Long (2013) found that late L2 learners increasingly rely on explicit mechanisms for language acquisition, which indicates that older learners use their explicit or declarative knowledge as the main resources for language learning. Memory-based processes are the strengths of young learners, whereas adult language learners are usually more successful with rule-based learning (Nikolov, 2009). The findings of Krashen et al., (1979) indicated that in early stages of learning morphology and syntax, adult learners progress faster than children. The acquisition of lexical semantics seems to remain "available throughout an individual's lifespan" (Ioup 2005, p. 421). A few grammatical structures (e.g. word order, questions) can be less difficult to pick up for late L2 English learners (e.g. university students) than others (e.g. articles, regular past), as indicated by McDonald (2006). FL learning may be easier for elderly learners if they are aware of their motivations, strengths, and weaknesses, as reported by Ramírez Gómez (2016) based on the results of a mixed-methods study conducted among older Spanish learners in Japan.

In terms of the use of metacognitive strategies in language learning, studies have yielded contradictory results related to language learning by adults compared to that by younger learners. For instance, Oxford and Ehrman (1990) indicated that adult learners are able to use learning strategies in a better manner than younger learners. By contrast, Griffiths (2013, p. 75) found no difference between older and younger students in terms of using learning strategies. Furthermore, DeKeyser et al. (2010) revealed that language learning processes in childhood and adulthood are different not only after reaching a certain level but also in their very nature. Among other things, their findings evidenced a decline in the ability to learn grammar before the onset of adulthood. In their review article, DeKeyser and Larson-Hall (2005) concluded that late language learners face more difficulties in learning grammar than younger learners (similarly Nikolov, 2009). To summarise, the results of the aforementioned studies vary considerably in describing how adults learn languages in comparison with other age groups.

B. Teaching Methods in Adult Language Learning

In the literature, we were unable to find teaching methods that are tailored to meet the needs of adult language learners (Ramírez Gómez, 2016, Ch. 1) and increase their motivation to learn languages. In the period of communicative approach, many L2 studies recommend the use of best practices, in which students are exposed to as much authentic input in the target language as possible and are able to communicate with their peers (Brown, 2007). Moreover, as with every type of learning, a friendly and supportive atmosphere in the classroom is very important for adult learners as well (McKay & Tom, 1999, p. 16), and the teacher plays a vital role in creating such an atmosphere.

In a friendly and supportive atmosphere, adults are more likely to risk using the new language. Adult language learners may feel uncomfortable when they are unable to express themselves intellectually in a foreign language (Johnson, 2015, Ch. 4). In learning languages other than English as L3 in the university context, students can feel frustrated when using the target language (McKay & Tom, 1999, p. 16). They can easily give up and switch to their L1 or their stronger L2 English when interacting with their peers in the classroom (Maijala et al., 2018). Another factor is that they may not get opportunities to use the target language in the classroom. As concluded by Nunan (1991, cited in Nunan, 2005, p. 226–227), who reviewed 50 classroom-based studies, on average, teachers tend to talk twice as much as students in FL classes, and in some studies, they were found to talk for more than 80% of the time. This is problematic, especially in the context of teaching languages other than English in higher education, where students' proficiency is rather low.

In general, motivational factors play an important role in adult language learning. One possible strength of adult FL learners could be their motivation. Learning a new language as an adult can be seen as an investment (Norton, 2000), for instance, to secure new professional opportunities or to learn the language for familiar reasons. Dörnyei (2001, Ch. 5) suggested the following methods to increase motivation in an FL classroom: i) creating motivational conditions (e.g.

supportive atmosphere in the classroom), ii) generating and maintaining initial student motivation (e.g. setting goals, improving positive learning experiences, and increasing learners' self-confidence), and iii) encouraging positive self-evaluation (e.g. providing motivational feedback). In FL classrooms, one strategy for cultural learning is 'bringing the outside in', that is, bringing the life experiences of language learners into the classroom (Roberts & Baynham, 2006, p. 3).

In adult language learning, the specific context of learning languages other than English has not been investigated in depth. An example of a study in this field is Johnson (2015). She conducted a semester-long case study among English-speaking college students in the USA who were learning Spanish in a traditional instructor-led classroom setting. Johnson (2015, Ch. 7) found evidence that as a result of their language study, the students improved, especially in the following areas: i) exploring new sources of knowledge, ii) becoming more self-directed, and iii) critically assessing their own language and culture. As stated above, grammar and vocabulary learning are usually the strengths of adult language learners. Adult learners often regard grammar as the most important content of FL teaching and learning (Ellis, 2002). Ellis et al. (1999) found that the focus-on-form approach (grammar and accuracy) is more widely used than the communicative approach for teaching adult English learners. However, we note that the focus-on-form and communicative approaches are not necessarily contradictory to each other. Moreover, Borg and Burns (2008) revealed that language teachers preferred more explicit grammar instruction when teaching adults. Furthermore, the dominance of grammar teaching can be observed in teaching materials as well. For instance, Tomlinson et al. (2001) evaluated eight adult English course books and found that they concentrated mostly on explicit grammar instruction and did not necessarily encourage learners to use the language communicatively.

In the Finnish context, the study of Pitkänen (2018) conducted at the Language Centre, University of Helsinki, provided an overview of goal development in English course catalogues over four decades and compared these goals with students' needs. Based on 365 students' Common European Framework of Reference for Language (CEFR) self-assessments completed in faculty-specific English courses and 20 interviews of students who had graduated from the university studies, he concluded that the focus of the English courses had shifted from receptive skills to productive skills, which students find essential for their future working life. Accordingly, the focus in the English course descriptions generated between 1977 and 2016 shifted from reading comprehension to productive skills. In addition, an analysis of students' self-assessment demonstrated that the students felt their productive skills were generally weaker than their receptive skills.

III. RESEARCH PROJECT

A. Participants and Data Collection

Overall, in the current study, we aimed to identify the factors that enhance adult language learning. Various voluntary foreign language courses (French, German and Italian) offered by the language centre of a Finnish university were the focus. In this context, the role of languages other than English—especially French and German—has diminished in Finland, and they are no longer as widely taught in Finnish schools as they used to be (Kangasvieri, 2019). Accordingly, the resulting decline in the knowledge of languages other than English has affected the language courses offered at universities (Pitkänen, 2018). Because English is a lingua franca, languages other than English have to be taught in a less academic and more general manner at Finnish universities. Since the 1990s, the emphasis on language instruction in Finland has gradually moved towards communicative language skills. In recent years, with the launch of a curriculum reform for basic education (FNBE, 2016), intercultural communicative competence, media literacy and language awareness have gained prominence as the goals of university language courses.

Our small-scale questionnaire study focused on courses in languages other than English that were offered by the language centre of a Finnish university. The researcher decided to gather data only at one university aiming to improve teaching in this particular language centre. A link to the web-based questionnaire was sent to several teachers at the language centre, who, in turn, were asked to forward it to their students through the Moodle platform. The questionnaire (see Appendix) was sent to students through the Moodle learning platform. It was answered by 53 university students from different language courses (see Table 1) for an approximate return rate of 42%. The respondents represented different majors, such as languages (18), history and political science (8), law (5), chemistry/biochemistry (4), social sciences (4), information technology (2), education (1), literature (1), management (1), religion (1), mathematics (2), folkloristics (2), medicine (1), geology (1) and other programmes (2). Most of the respondents were either at the onset or end of their studies (see Table 1). This may be because at these stages, students are more likely to find free time to enrol in optional language courses. For instance, fifth-year students are often engaged in writing master's theses. In the context of our study, the students were usually linguistically and culturally homogenous, save for a few international students (see Table 1). Although there were native speakers among the course teachers, these teachers had acclimatised well to Finnish society and become familiar with the prevailing social norms.

TABLE 1
CHARACTERISTICS OF RESPONDENTS (N = 53).

Gender	Age	Nationality	Year of study	Language course	CEFR-level of language course visited at the moment of data collection [2014]	Previous knowledge of target language taught in the course
42 female 11 male	19–25 years: 38 25–30 years: 11 30–40 years: 1 40–62 years: 2 No answer: 1	Finnish: 50 Other: 3	1st: 12 2nd: 9 3rd: 8 4th: 6 5th: 14 No answer: 1	French: 18 German: 23 Italian: 12	A1–A2: 37 B1: 11 B2–C2: 5	Yes: 21 Some knowledge: 14 No: 18

As summarised in Table 1, most of the respondents enrolled in the language courses at the beginner level (A1–A2). Only a few enrolled in the courses at the intermediate (B1) or advanced levels (B2–C2). At the language centre, most of the courses in languages other than English were offered at the beginner level. The respondents were asked about their previous knowledge of the language they were taking. Most respondents reported that they had studied the language 'a little', 'a little bit' or 'some simple and short phrases'. If they had learned the language before the course, it was mostly at school.

The questionnaire mostly contained open-ended questions and one statement with responses on a Likert scale (ranging from 0 to 4; strongly disagree to strongly agree, respectively) (see Appendix 1). Because the number of respondents was expected to be limited, we opted to include open-ended questions. Moreover, responses to the open-ended questions usually provide more insightful data in the form of longer written responses (Borg, 2006, p. 169). The open-ended questions were asked in English (L2 of most of the respondents) because we expected the presence of international students. Moreover, English has become a lingua franca at Finnish universities (Pitkänen, 2018), which further cemented our choice of English. All the students responded in English; however, in the introduction to the questionnaire, it was mentioned that the respondents could answer in their L1 (Finnish). The students were informed that they were participating in a research study, and the purpose of the study was described to them (Wagner, 2015).

B. Research Questions and Methods

The specific research questions were as follows:
RQ1: What are strengths of foreign language courses in higher education?
RQ2: Which practices are beneficial for adult language learning?

The student questionnaire data were quantitatively and qualitatively analysed to answer the research questions. The responses were coded, and the keywords used by the respondents were assigned to different categories, which were elaborated on using the examples and explanations provided by the respondents (Borg, 2013, p.35). The number of respondents (N = 44–53) varied across questions because not all the respondents answered all the survey questions. The analysis was conducted in the original language of the responses. First, the responses were coded according to the research questions. Subsequently, they were analysed to determine recurring themes. Based on a grounded approach, categories emerged from the questionnaire data (Strauss & Corbin, 1990). The data were organised and quantified to determine the frequency of the responses. The number or percentage of students who mentioned the topic when answering a question is listed in parentheses. When examples were given, the notion of language was, in most cases, omitted to ensure anonymity of the teachers and students. The language in the data examples is original. As a limitation of the study, it can be said that the number of participants was relatively small and that the study was conducted in one university language centre. We would also like to emphasise that the responses are merely the students' opinions.

IV. FINDINGS

A. Strengths of the Course (RQ1)

Through an open-ended question, the students were asked to mention the reasons for choosing the language course in which they were enrolled. Most of the students (26%) wanted to continue learning a certain language or maintain already acquired language skills. Seven out of 53 students stated that they were interested in the particular language and culture. A few students (4/53) stated that the language was useful to them or that the course fitted in to their study schedule. Reasons related to university studies were mentioned as well, such as a need for the language in their studies (3/53), willingness to study the language as a minor subject (3/53), and to study in the country where the language is spoken (3/53). Other reported motives (one per motif) were as follows: 'the language courses are for free', '[it is] good to know languages other than English', 'I like to learn new languages', 'I like the language', 'the language was not my first choice', 'my friend asked to me to join the course', 'another language was too difficult', 'the language belongs to general education', 'personal reasons', and 'my friends speak this language'. Emotional reasons such as 'beautiful language' were mostly connected to Italian. Practical reasons such as usefulness, by contrast, were linked mostly to German. Generally, the students were motivated to learn the language because they believed that doing so would be useful for them in the future (cf. Johnson, 2015, Ch. 2).

The students were asked if they were more interested in the target language after attending the course. They were provided an opportunity to qualify their answers. 41 of 53 respondents answered positively and many of them wished to

visit the target country after the course. In many cases, the teacher or the native speakers who assisted in the course increased the students' interest in the language, as illustrated by the following excerpts:

> *[…] When I came here, I liked […], but now, I just love it. The teacher makes it so easy to understand it that I think I can understand it quite well.*

> *The […] exchange student gave me more motivation for studying […] because he was so well-mannered and social (unlike some Finns).*

23% of the respondents who answered 'no' specified that they 'were already interested when the course started'. A few students were not satisfied with the textbook used in the course.

TABLE 2
STRENGTHS OF THE LANGUAGE COURSES MENTIONED BY THE STUDENTS (N = 52).

Strengths of the courses	Students who mentioned the strengths (N = 52) (multiple mentioning possible)		Examples
	Number	%	
Teacher	27	51.92	*The teacher is lovely, and her attitude is great. She also makes us do a lot of oral exercises, which I think is great. Because the teacher's native language is not Finnish, she encourages us with her own example to speak and use the language and not be worried about producing 'perfect' structures. The emphasis is on communication rather than on learning grammar perfectly. The teacher also speaks a lot in [the target language] which is very helpful.*
Oral exercises	12	23.08	*An opportunity to speak often in the target language is one of the major strengths of this course.*
Cultural information/ Interesting topics	9	17.31	*We always discuss topical issues that the students themselves have chosen newspaper articles, what is happening in different states in Germany, etc.*
Visits of peers from the target culture	8	15.38	*It is nice to have [students from the target country] visiting in the class because that way we can practise our listening comprehension in more genuine situation.*
Varied activities	7	13.46	*I think that the strength of the course is its comprehensive nature and wide range. I mean that we focus on many important aspects of language learning: grammar, vocabulary, reading aloud, pronunciation and listening, and also slightly speaking and writing training, and some […] culture.*
Grammar teaching	6	11.54	*I think you [I] have a very clear knowledge of the grammar of the language because [our teacher] explains it really well, and you [I] also learn a lot of vocabulary.*
Atmosphere in the class/group	6	11.54	*A warm, comfortable environment that does not hinder learning or participation in the course activities.*
Book/Study material	5	9.54	*I think that we have a good teacher who has put a lot of time in the course. She has researched all kinds of books […] and chosen the best.*
Planning of the course	4	7.69	*Very well planned course.*
Work in pairs/groups	3	5.77	*Speaking happens usually in small groups, so it is much nicer than performing in front of the class.*
Time to learn	2	3.85	*It is not too hasty. We have the time to actually learn the language.*
Small group	2	3.85	*There are very few participants in the course. This ensures that our teacher has the time to give us personal advice.*

As summarised in Table 2, the strengths of the course were the 'teacher' and 'interaction' with the teacher or peers. In addition, the teaching materials, which corresponded to the needs of the students, were found to be important. Mentions about the choice of the teaching materials as well as the planning and structure of the course were credited to the teacher. Fifty-two percent of the respondents mentioned the teacher as the strength of the course. It was important to them that the teacher used the target language extensively or corrected pronunciation. In general, the teacher's characteristics mentioned by the students were very positive. Students characterised their teachers as 'very nice and friendly', 'lovely', 'great', 'always ready to answer our questions', 'enthusiastic', 'positive', 'very helpful', 'very good', 'nice', 'inspiring', 'experienced', 'supportive', and 'encouraging', but also as 'strict enough'. Native-speaker teachers or teaching assistants, who 'really can speak the language', were mentioned 9 times in the data. In addition, the students valued the fact that the teacher 'has time to give us personal advice', 'corrects […] pronunciation more often than I am used to', 'gives us a lot of information about [the target country] and its culture', and 'makes us speak'. The positive reactions of the students correspond to the following answer statement on the Likert scale: 'The language course meets my needs', and 91% of the respondents agreed or strongly agreed with this statement.

In addition to the strengths of the course, the students were asked what they would change in the course and to provide examples of such changes. Although many of the students found oral exercises in the course as beneficial for their learning, 8 students stated that the oral exercises could have been more interactive. For instance, as one respondent stated: 'There should be more conversation in smaller groups so that even Finnish students can muster the courage to be more interactive. Now, the course mostly involves monologues in the form of students' presentations'. This indicates that oral activities employed in the courses were not necessarily designed to foster interaction among students.

B. Good Practices (RQ2)

Elaborate responses to activities used in the language course that contributed the most to learning were elicited through an open-ended question. Most of the students mentioned more than one activity. A few students reported that they were unable to indicate one specific activity because all activities employed in the course were beneficial for their learning. As summarised in Table 3, activities in which interaction and collaboration occurred were rated as the most useful by the students. Especially, the students found oral activities to be meaningful because these activities enabled them to produce language (Pitkänen, 2018). As one student pointed out: 'You can always read words and texts, and even the grammar, at home by yourself, but it is more difficult to speak it alone in different situations'. When mentioning discussions, some students stated that they felt good when 'the teacher listens and corrects our mistakes'.

TABLE 3
IN-COURSE ACTIVITIES THAT THE RESPONDENTS FOUND THE MOST USEFUL

In-course activities that the respondents found the most useful	Students who mentioned the activity (N = 51, multiple mentioning possible)	
	Number	%
Oral activities/discussions	25	49.02
Listening activities	8	15.69
Working in pairs/groups	7	13.73
Grammar exercises	5	9.80
Writing exercises	4	7.84
Reading exercises	3	5.88
Giving presentations to other students	3	5.88
Vocabulary exercises	2	3.92
Going through texts thoroughly (with the teacher)	2	3.92
Revision exercises	1	1.96
Working independently outside the classroom	1	1.96
Explanations from the teacher	1	1.96
Productive exercises	1	1.96
Translation exercises	1	1.96
Tests	1	1.96

Oral activities, listening, working in pairs/groups, and giving presentations to other students involved some type of interaction. The following excerpts from the data illustrate the need for interaction:

In this particular course, the most useful activities are conversations with others and listening to native speakers.

The activities in which students speak with one another are highly helpful and useful. Similarly, listening to texts or videos in […] has improved my listening comprehension.

Furthermore, the students were asked how they would prefer to be assessed in the particular language course. According to the answers, 39% of the students seemed to be satisfied with the current practice, that is, mostly a written exam at the end of the course, which was often described as the 'normal way' or 'like it [assessment] is done now'. In addition to the written exam at the end of the course, 30 % of students liked ongoing classroom assessments, as indicated by the comments of a few of them:

Taking in account the written exam but also your attendance and your contribution during the conversations in class.

It should take notice the whole participation and the improvement that has happened during the course.

Vocabulary and grammar tests assigned during the course as opposed to final tests were mentioned 9 times to be beneficial in the beginner courses (A1–A2) in particular:

We have word-exams and end-exam. It has been ok now when we are just beginning with a new language. Later can be different ways.

Moreover, the teacher played the decisive role in the assessments: only one respondent mentioned the need for self-assessment. 4 students found feedback from the teacher to be important, as illustrated by the following comment:

> *I would like to know how well I am doing in different areas of learning, for instance, written and spoken skills. Pronouncing the target language correctly is important to me, and thus I would like to have pronunciation tests which would be graded by the teacher.*

The students were asked how their own contributions affected their learning in the course. Thirty-eight percent of the students reckoned that studying outside the classroom supported learning in the course. The following excerpts illustrate this:

> *[...] I learn vocabulary, lessons, and grammar at home so that I can concentrate on more difficult and more important things in the classroom.*
>
> *[...] I have noticed that if I have to skip a lesson or two, I get really behind. The really fast pace of the course makes it that you really have to attend to every lesson, or, if you can't, you have to use a LOT of time at home. Even attending to courses isn't enough because I think most of the learning happens at home, so your own contribution is everything if you want to learn the language.*

Thirty-four percent of the respondents acknowledged that their own activities in the classroom contributed to the success of the course. Forty-six percent of the respondents stated that studying outside the classroom supported their learning in the language course, as can be seen in the comment below:

> *I read the texts and do my homework. I listen to [...] music and read texts (on the web) I am interested in. I want to learn [...], so I do the things that makes it possible. I have a good teacher, but she can't make the studying for me. I have to do it myself.*

Although it was widely acknowledged by the students that practising the target language outside the classroom contributed positively to their language learning, the influence of the target language on their daily life remained modest. Most respondents (63%) stated that the target language hardly influenced their daily life. Four students brought up the importance of using the target language outside the classroom. Here, it must be considered that the languages in question were not English. The influence of the language depended considerably on the students' own contributions. The students (N = 51) reported that they 'watch TV/films in the target language' (7), 'have native-speaker friends' (5), 'read books in the target language' (4), 'listen to music in the target language' (4), 'read news in the target language' (3), 'plan a trip to the country of origin of the target culture' (3), 'want to find a job in the country of origin of the target culture' (3), 'mix languages or have started thinking in the language' (3), 'read scientific articles in the target language' (2), 'do the homework' (1), 'need the language for a job' (1) or 'hear the target language in the campus area' (1). To summarise, it seemed that independent learning in informal contexts outside of the course seems to be very limited in the case of languages other than English. Moreover, the responses implied that implicit learning outside of the course classroom was also guided by the teacher, for instance, through assigned homework, music, and reading tips.

V. DISCUSSION AND CONCLUSIONS

In this article, we aimed to find strengths and good practices of foreign language courses in higher education. The results of our small-scale questionnaire study among learners of Italian, French, and German (N = 53) at the language centre of a Finnish university indicate that the focus of university language courses might have shifted from receptive to productive language usage (cf. Pitkänen, 2018). The strongest evidence from our study was the indispensable role of a teacher in university language courses. This was the only one item that received 50%-and-above score.

To some extent, our findings imply that face-to-face communication seemed to provide learners with the feeling that they actually have learned the language. Explicit and intensive use of L3 in the classroom appeared to be an effective teaching method in adult language courses. Through guided oral activities, students seemed to notice and reflect on specific language features. At the beginner level (A1–A2), learners appeared to need strongly guided production activities. In this stage, learners required scaffolding, for instance, supportive word lists or other tailor-made inputs. These were found to be important to allow learners to produce at least something in the target language.

Our findings are consistent with the results obtained in a recent study by Pitkänen (2018) that was conducted in faculty-specific English courses at the Language Centre, University of Helsinki. The findings of both studies indicate that Finnish university students wish to improve their productive skills through language courses offered in higher education. In English courses, students need to practise discipline-specific interaction and communication, and in the case of languages other than English, students need to train in interactions for general academic purposes (Pitkänen, 2018). Activities in which interaction and collaboration occurred were rated as being the most useful by the students. Specifically, the students considered oral activities as meaningful because during these activities, they were able to produce the target language with their peers. The students clearly needed additional support for training their productive skills rather than receptive skills (Pitkänen, 2018). Explicit learning of grammar and lexical items (Krashen et al., 1979; Ellis, 2002; Long, 2005) seemed to be needed to a lesser extent than oral exercises. In terms of grammar instruction, the students appreciated a clear and structured approach. Hence, the students' views confirmed the conclusion of Pitkänen (2018) that language courses in higher education should be developed to hone students' productive and interactive skills.

Over the past decades, language education has gradually shifted from a teacher-led to a student-centred pedagogy. Although the student-centred approach is emphasised in the course goals (Pitkänen, 2018), students seemed to need strong guidance from the teacher. The findings of our small-scale study indicated a contradiction between teacher-led and student-centred practices in these language courses. On the one hand, adult FL learners in our study saw the

language teacher as a central figure in the class. They expected instruction and guiding in the target language from the teacher. This may be ascribed to the fact that in the case of languages other than English, inputs from the teacher were important because students do not necessarily hear and read the language outside the classroom. On the other hand, the students expected the teacher to guide them to use the target language in interactions with their peers. This meant that the teacher should create natural situations in which the students can use the language with their peers. Based on our findings it appeared that some teachers were able to positively influence the students' interest in the target language. In doing so, the teacher played an important role in shaping the intrinsic motivation of the students, and empowerment of students is inevitably one of the key factors in adult language learning (cf. Dörnyei, 1994). Moreover, although following students' opinions does not necessarily result in better efficiency in language courses, language teachers in adult education may find our results valuable for their teaching practice.

APPENDIX QUESTIONNAIRE

1–8. Basic information (Gender; Age; Nationality; Year of study at the university; Major and minor subject(s) at the university; Information about the language course (e.g. level of the course).

9. Why did you opt for this language course?

10. Did you speak the target language when you started the course?

11. What are the strengths of the course? Please provide examples where possible.

12. What would you change in your language course? Please provide examples where possible.

13. How does the target language influence your daily life?

14. Please rate how strongly you agree or disagree with the following statement by placing a check mark in the appropriate box. ('The language course meets my needs.')

15. Are you more interested in the target language after attending the course? Please provide examples where possible.

16. Which activities in your language course contributed the most to your learning?

17. How would you like to be assessed in your language course?

18. How does your own contribution affect your learning in the course?

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REFERENCES

[1] Bialystok, E. & Miller, B. (1999). The problem of age in second-language acquisition: Influences from language, structure, and task. *Bilingualism: Language and cognition 2*(2), 127–145.

[2] Birdsong, D. (2014). Dominance and age in bilingualism. *Applied Linguistics 35*(4), 374–392.

[3] Borg, S. & Burns, A. (2008). Integrating grammar in adult TESOL classrooms. *Applied Linguistics 29*(3), 456–482

[4] Brown, H. D. (2007). *Teaching by Principle: An Interactive Approach to Language Pedagogy* (3rd ed.). New York: Pearson Longman.

[5] DeKeyser, R. (2013). Age effects in second language learning: Stepping stones toward better understanding. *Language Learning 63*, 52–67.

[6] DeKeyser, R., I. Alfi-Shabtay & Ravid, R. (2010). Cross-linguistic evidence for the nature of age effects in second language acquisition. *Applied Psycholinguistics 31*(3), 413–438.

[7] DeKeyser, R. & Larson-Hall, J. (2005). What does the critical period really mean. In J. F. Kroll & A. M. B de Groot (Eds.), *Handbook of bilingualism: Psycholinguistic approaches*. (pp. 88–108). Oxford: Oxford University Press.

[8] Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *The Modern Language Journal 78*(3), 273–284.

[9] Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom*. Cambridge: Cambridge University Press.

[10] Elias, J. L. & Merriam, S.B. (2005). *Philosophical foundations of adult education*. Malabar, FL: Krieger.

[11] Ellis, R. (2002). The Place of Grammar Instruction in the Second/Foreign Language Curriculum. In E. Hinkel & S. Fotos (Eds.), *New Perspectives on Grammar Teaching in Second Language Classrooms* (pp. 17–34). Mahwah, N.J: Lawrence Erlbaum Associates.

[12] Ellis, R., Loewen, S. & Basturkmen, H. (1999). *Focusing on form in the classroom*. University of Auckland, Institute of Language Teaching and Learning.

[13] FNBE [Finnish National Board of Education]. (2016). *National Core Curriculum for Basic Education 2014*. Helsinki: Finnish National Board of Education.

[14] Granena, G. & Long, M. H. (2013). Age of onset, length of residence, language aptitude, and ultimate L2 attainment in three linguistic domains. *Second Language Research 29*(3), 311–343.

[15] Guglielman, E. (2012). The ageing brain: Neuroplasticity and lifelong learning. *eLearning Papers 29*, 1–7.

[16] Hakuta, K., Bialystok E. & Wiley, E. (2003). Critical evidence: A test of the critical-period hypothesis for second-language acquisition. *Psychological science 14*(1), 31–38.

[17] Ioup, G. (2005). Age in second language development. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 419–436). New York, London: Routledge.

[18] Johnson, S. M. (2015). *Adult Learning in the Language Classroom*. Bristol: Channel View Publications.

[19] Kangasvieri, T. (2019). L2 motivation in focus: the case of Finnish comprehensive school students. *The Language Learning Journal 47*(2), 188–203.

[20] Krashen, S. D., Long, M. A. & Scarcella, R.C. (1979). Age, rate and eventual attainment in second language acquisition. *TESOL Quarterly 13*(4), 573–582.

[21] Lenneberg, E. H. (1967). The biological foundations of language. *Hospital Practice 2*(12), 5–67.

[22] Long, M. H. (1990). Maturational constraints on language development. *Studies in Second Language Acquisition 12*(3), 251–285.

[23] Long, M. (2005). Problems with supposed counter-evidence to the Critical Period Hypothesis. *International Review of Applied Linguistics in Language Teaching 43*(4), 287–317.

[24] Maijala, M., Pagèze, J. & Hoskins, L. (2018). What happens when students do tasks? A comparative, reflective study of student-centred activities in foreign-language classrooms in higher education. *Scottish Languages Review 34*. URL: http://dx.doi.org/10.6084/m9.figshare.6882605.

[25] McDonald, J. L. (2006). Beyond the critical period: Processing-based explanations for poor grammaticality judgment performance by late second language learners. *Journal of Memory and Language 55*(3), 381–401.

[26] McKay, H. & Tom, A. (1999). *Teaching adult second language learners*. Cambridge: Cambridge University Press.

[27] Murray, D. E. (2005). ESL in Adult Education. In E. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning*. New York, London: Routledge, 65–84.

[28] Nikolov, M. (2009). The age factor in context. In M. Nikolov (ed.), *The Age Factor and Early Language Learning* (pp. 1–38). Berlin, New York: Mouton de Gruyter.

[29] Nunan, D. (2005). Classroom Research. In E. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning* (pp. 225–240). New York, London: Routledge.

[30] Norton, B. (2000). Identity and language learning: Gender, ethnicity, and educational change. London: Longman.

[31] Oxford, R. L., & Ehrman, M.E. (1995). Adults' language learning strategies in an intensive foreign language program in the United States. *System 23*.3, 359–386.

[32] Paradis, M. (2009). *Declarative and procedural determinants of second languages.* John Benjamins Publishing.

[33] Pitkänen, K. K. (2018). From a reader/listener to a speaker/writer: Student views confirm the need to develop English courses further towards productive, interactive skills. *Language Learning in Higher Education 8*(2), 445–468.

[34] Ramírez Gómez, D. (2016). *Language Teaching and the Older Adult: The Significance of Experience*. Bristol, Blue Ridge Summit: Multilingual Matters.

[35] Roberts, C. & Baynham, M. (2006). Introduction to the special issue: Research in adult ESOL. *Linguistics and Education 17*(1), 1–5.

[36] Strauss, A. L. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, Calif.: Sage.

[37] Tomlinson, B., Dat, B., Masuhara, H. & Rubdy, R. (2001). EFL courses for adults. *ELT Journal 55*(1), 80–101.

[38] Wagner, E. (2015). Survey Research. In Paltridge & A. Phakiti (Eds.), *Research Methods in Applied Linguistics: A Practical Resource* (pp. 83–99). Bloomsbury Publishing.

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Comparative Analysis of English Prepositions *In* and *On* Translated Into Albanian

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Abstract—The most common use of prepositions is to express the meaning of words placed before a noun or a pronoun, and as such they are used very frequently. The English language as well as the Albanian language, uses prepositions frequently, thus enriching the given language and allowing for a clearer expression of the functions of a sentence. This research is centered around certain prepositions in English which have a high frequency of use, and yet are quite simple. While comparing them, we will deepen the knowledge of these most frequent prepositions in English, their use and how they are translated into Albanian. These language comparison studies are becoming increasingly appealing. The structure and norms under which words interrelate are part of the study of language as a method of communication. Scholars are faced with the requirement to perform research on challenging subjects and make global and local comparisons. Therefore, this research looks into analytical and comparative analysis with the aim of enlightening and empowering the current use of prepositions *in* and *on* and giving a clearer picture of their translations in Albanian. The research is based on the analysis of two English novels that have been translated into Albanian.

Index Terms—prepositions, analysis, time, in, on

I. INTRODUCTION

The most common use of prepositions is to express the meaning of words placed before a noun or a pronoun, and as such they are used very frequently. The English language as well as the Albanian language, uses prepositions frequently, thus enriching the given language and allowing for a clearer expression of the functions of a sentence. According to Fang (2000), "they are statistically frequent in that there is one preposition in roughly every ten running words of English. Functionally, it plays the largest variety of syntactic roles a grammatical phrase can play in a sentence" (p.183).

Prepositions serve as binders and are very important in the sentence because they connect words with each other. Sentences without a preposition could be meaningless, short and fragmented, it would be unclear as to what actions were committed by whom, or when they should occur, or if they have already occurred. These small words such as *in, on,* etc., are used often and have different meanings so there is little hope for all those who want to learn English to internalize all the meanings of these prepositions. Therefore, mastering them is not an easy task for foreign students due to these different meanings and their polysemic nature. The meaning of temporal prepositions is again different, Bennett (1975) says that "The study of temporal prepositions is considerably more complicated than that of spatial, because it is intricately bound up with a verbal aspect" (p.360).

II. LITERATURE REVIEW

Prepositions are especially difficult for the English Language Learner (ELL) for a number of reasons (Boquist, 2009) "because each language has its own set of rules, there are clash points when learning a second language" (p.8). Since prepositions cause such a problem for ELL, Evans and Tyler (2003) have proposed a new system for understanding prepositions: Cognitive Linguistics, in effect, reveals how we subconsciously think about prepositions. Each preposition has a central meaning, which is the mental picture of a spatial relationship. Once the central meaning of a preposition is found, it becomes clear that the various meanings branch in a polysemic network (p. 26).

The same opinion is shared by many grammarians, such as Lindstromberg (1997), Swan (2002), Quirk (1985) and others. According to Lindstromberg (1997), people think of time in one of two ways:

1. like a stream, tide or road carrying us from the past into the future (e.g., *as we move into the next millennium…)*; and 2. like a wind or tide that moves toward us out of the future, carrying events and time periods (e.g., *the upcoming meeting, the coming week*) (p. 50).

Of course, this is not to be discouraged, but it is important to note that not all meanings are equally important. We have seen that some prepositions are used more frequently than others. Prepositions *in* and *on*, as prepositions of time (Quirk & Greenbaum, 1973) "are to some extent parallel to the same items as positive prepositions of positions,

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although in the time sphere there are only two 'dimension-types', viz 'point of time' and 'period of time'"(p.154). It seems from the analysis of the novels that spatial prepositions are the most frequent ones and many of them can be used as prepositions of time as well.

The most common meaning of prepositions is that they are used to express the meaning of words placed before a noun or e pronoun, and as such they are used very frequently. Both the English language and the Albanian language use prepositions frequently. The Albanian language, in terms of grammatical system, has gone through the same route as to that of other Indo-European languages, since it belongs to that linguistic group. Despite the changes that result from that path, languages retain many common features as well as differences in their grammar system. In our case of study, compared to English, Albanian has cases (Xhuvani, 1964) that English does not have (besides genitive case).

The theme of this research is centered around certain prepositions in English which have a high frequency of use, and yet are quite simple. While comparing them, we will deepen the knowledge of these most frequent prepositions in English, their use and see how they are translated into Albanian. These language comparison studies are becoming increasingly appealing. The structure and norms under which words interrelate are part of the study of language as a method of communication. Scholars are faced with the requirement to do research on challenging subjects and make global and local comparisons. Therefore, this research looked into analytical and comparative analyses with the aim of enlightening and empowering the current use of prepositions and giving a clearer picture of their translations in Albanian. The research is based on the analysis of two novels in English translated into Albanian:

- "White Fang" by Jack London, translated by Mikaela Minga as "Dh ëmbi i Bardh ë" (hereinafter as W. F. and Dh. B.); and - "Dubliners" by James Joyce, translated into Albanian by Idlir Azizi as "Dublinasit" (hereinafter used as D. and Dubl.).

The decision to base the study on the above-mentioned novels derived from the fact that both Jack London and James Joyce stand in high regard in both languages, and as such have been translated into Albanian. Given the complexity of the topic, we admit that there is a great deal to say about English prepositions and their Albanian counterparts, as Blamires (2000) said, "It would not be an exaggeration to say that there is an epidemic of prepositional anarchy around" (p.1).

III. PREPOSITION *IN*

As stated above, so it is with meanings of the preposition *in,* which is one of the most basic and frequently used prepositions in English, not only in cases denoting space but also in cases denoting time. Since the preposition *in* has a meaning of an enclosed space or boundary with the subject inside or expressing something "inside", such as *The key is in the drawer*, in cases of time relation the preposition *in* is used with this "space of time" *They arrived in 2005*.

If we think of the key inside the frames of a *drawer*, then *2005* is considered as a time frame (the main action happened somewhere in 2005). The time phrase expressed in the sentence above (*in 2005*) is not very precise as it doesn`t show exactly the time when the action did happen; only that it happened in 2005. This indefinite time may deepen in the past as can be seen even from the following examples when prepositional phrases *in the old days* and *in the past* do not show exact time as *in 2005* does. The moment we see the preposition *in* showing a rather exact time (*in 2005*), the next moment of *in* is indefinite in the past (*in the old days, in the past*):

1. *In the old days, he would have sprung upon White Fang…* (W. F. p. 104); (M ëpar ë do t`i ishte sulur Dh ëmbit t ë Bardhë dhe do t`ia… [Dh. B. p. 108]).
2. *In the past, he had liked the comfort and surcease from pain.* (W. F. p. 154); (M ëpar ë ai shikonte rehatin e vet dhe urrente vuajtjen. [Dh. B. p. 158]).

As both PPs are separated by a comma in English, the translation in Albanian is not found as such, but both prepositional phrases appear translated with the same prepositional phrase (*in the old days/in the past = m ë par ë*). Regarding their indefinite time, the prepositional phrase in Albanian does not show such an indefinite distant time as in English. From the analyses of Albanian novels, the same PP (*m ë par ë*) appeared translated with the adverb *earlier* or preposition *before*. Therefore, we consider that, in order to show this "distant" indefinite time, an Albanian adverb *dikur* could be replaced with PP *m ë par ë*, as in Fjalor i Gjuh ës ë Sotme Shqipe (1981, p. 336) adverb *dikur* expresses time in a distant past; a long time ago; long before now.

The meaning of preposition *in* as a frame of "time" is illustrated very well with the following example:

3. *I ran around the block in less than a minute.*

Lindstromberg (1997) illustrated the meaning of *in* as a line inside the box and not out of it and therefore the time limit is not "gone out of" but the action is finished before that time limit. So, the preposition *in* is used with longer periods in the past (*in October, in 1995, in the summer holidays, in the 16th century*) and parts of the day (*morning, afternoon, evening*) such as:

4. *They ain`t had a bite in weeks*… (W. F. p. 16)
5. *In the fall of the year, when the days were shortening*… (W. F. p. 90)
6. *In the morning it was Henry who awoke first.* (W. F. p. 9)
7. *In the evening my aunt took me with her to visit the house.* (D. p. 12)

However, this is not the only meaning of the preposition *in* as it may show different time meanings such as expressing time "in the future". This meaning is stretched within the period in the future, or by the end of that period;

(in five minutes) the train will leave, or may express time at the "later boundary" of the time frame (Lindstromberg, 1997, p.79), suggesting all along the meaning of duration of time how long something takes to happen, for example:

8. *The train leaves in five minutes.*
9. *Can you come back in/*after an hour; I`ll be free then*?
10. *He is a good runner. He can run 1000 meters in two minutes*.

From the first two examples one can understand that the focus is on the later edge of the time frame (not more than five minutes or more than an hour, but very close to the end of that time frame), whereas the third example suggests the duration needed to complete that action. The distinction between expressions such as *in a week's/months'* time and *in a week/month*, is used to tell how soon something will happen (a time in the future measured from the present), not how long something takes (Swan, 2002), for example:

11. *I`ll see you again in a month`s time.*
12. *It`ll be ready in three weeks' time* (three weeks from now).
13. *He wrote the book in a month*. (NOT …in a month`s time)

English prepositions have their synonymous meanings with other prepositions, when a certain meaning can be expressed by more than one preposition. In comparison to prepositions indicating place (*by/near; next to/beside; behind/in the back of*, etc.), these synonymous meanings get narrowed when it comes to prepositions of time, as they have fewer synonymous meanings (*during/in; in/at*). As seen in the previous chapter, the Albanian prepositions are richer in this field, given the fact that there are cases when three prepositions can express the same meaning (*af ̇ǎr/kah/nga dreka*). Let us see some examples in two languages:

14. *She always takes a trip to Turkey* $\begin{bmatrix} \underline{during} \\ \underline{in} \end{bmatrix}$ *the summer.*

15. *Takohemi aty* $\begin{bmatrix} kah \\ nga \ dreka. \end{bmatrix}$

In some contexts, we can either use the preposition *in* or leave it out, for example:
16. *Profits were $50 million, compared with $30 million (in) the previous year.*

In the following section, let us see some examples of when the preposition *in* can be replaced or not with other prepositions.

A. In vs At

As stated above, the preposition *in* is used with periods of time long enough to be considered a time frame (from the basic meaning of *in*) and if we continue with this basic meaning, then the preposition *at* represents points of time. But these two prepositions can interchange their meanings in certain cases, for example in the phrases *in the night* and *at night*. Let us see the following examples:

1. *I heard a noise in the night.* (= in the middle of the night)
2. *The windows are shut at night*. (= when it is night)

The first example includes the meaning of a particular night and the second one has a more general meaning such as any night or nights in general. According to Swan (2002), in an informal style these two prepositions can be left out, "when plurals show activities happening again and again" (p.80)

3. *He would rather study nights than days*!

Other ambiguous phrases are *in the end/at the end. In the end* suggests that something "happens after a lot of changes, problems or uncertainty and *at the end* simply refers to position at the end of something; there is no sense of waiting or delay Swan (2002), for example (p.201, 202):

4. *The tax man will get you in the end.*
5. *I wish I was paid at the beginning of week and not at the end.*

B. In vs During

Since the preposition *in* has several meanings and uses, one similar meaning is with the preposition ***during*** when both prepositions are used to say that something happens inside a particular period of time (Swan, 2002) (August, night) and each preposition can be replaced with the other, for example:

1. *We`ll be on holiday during/in August.*
2. *I woke up during/in the night.*

According to the same grammarian (2002), besides similarities shown in the examples above, these two prepositions may not have the same meaning when we are talking about an action happening all the time in that period, for example:

3. *The shops are closed during the whole of August*. (NOT…in the whole of August).

C. Analysis of Preposition In

The above-mentioned fact, that the preposition *in* is one of the most frequent prepositions, is also based on our research from the analyses of the novels: in *White Fang*, out of 1214 appearances of the preposition *in,* only 68 occurred in sentences denoting time. In *Dubliners,* out of 1056 appearances of the preposition *in,* only 27 denoted time

relation. The high numbers in both novels show this preposition's frequency of use. In the following pages we will show these numbers in a tabular way and their translation as well. Regarding translation into Albanian, it was not always translated with preposition *në* as one might expect, but we found several cases translated with adverbs of time (*ndërkohë, nesër, pasdite*), with nouns (*ditën, natën*), and prepositions (*rreth, më, në, nga, gjatë, pas*, etc.).

D. English In ➡ *Albanian Në*

1. *In the morning, Henry aroused by fervid blasphemy that proceeded…* (W. F. p. 11) (Në mëngjes Henrikun e zgjoi një mallkim i papritur…. [Dh. B. p. 14]).
2. *In the fall of the year, when the dogs were shortening and the bite….* (W. F. p. 90) (Në vjeshtë ditët ishin shumë të shkurtra dhe në ajër ndiheshin…[DH. B. p. 94]).
3. *…and, in an ironical moment, the headline of an advertisement ….* (D. p. 103) (…dhe në një çast ironie kishte sajuar një kaptinë reklame…[D. p. 138]).
4. *, and if he could get the copy done in time, Mr. Alleyne might give him an order on the cashier.* (D. p. 83) (…dhe nëse e mbaronte kopjen në kohë z. Allejni mund t`i jepte një paradhënie. [D. p. 115]).

From the examples above, we see that all prepositional phrases with preposition **in** are divided by a comma, regardless whether they are in the beginning or the middle of a sentence, but such a thing is not observed in Albanian translation.

The first three examples (3.2.1.1; 3.2.1.2.; 3.2.1.3) are very much into the meaning of the preposition **in,** in two languages (*in, në*). In the last example (3.2.1.4), the preposition **in** (in time) expresses something done "before the exact or given time" such as *We were enough in time to have a coffee before the flight*, and the Albanian preposition *në* expresses a rather exact time; we think that the prepositional phrase *in time* should be translated with prepositional phrase *me kohë*, as it suggests something done previously (me kohë - më përpara).

E. English In ➡ *Albanian Adverbs of Time*

1. *You jes`shut up now, an` go to sleep, an` you`ll be hunkydary in the mornin`…* (W. F. p. 8) (Tani mbylle gojën dhe fli! Nesër do të jesh sërish fill…. [Dh. B. p.11]).
2. *In the afternoon he blundered upon a ptarmigan.* (W. F. p. 43) *(Pasdite gjeti një thëllëzë dëbore afër një shkurreje. [DH. B. p. 48]).*

The preposition **in**, being used with parts of the day (*in the mornin`, in the afternoon*) appeared translated into Albanian with adverbs of time that fit perfectly to English PP's because both of them denote parts of the day (*in the morning`- nesër; in the afternoon - pasdite*).

3. *In the meantime, Bill had thought himself of the rifle…* (W. F. p. 21); (Ndërkohë Billit iu kujtua pushka…[Dh. B. p. 24]).
4. *And in the meantime, the she-wolf, the cause of it all, sat down contentedly on her …and watched.* (W. F. p. 34); (Ndërkohë ulkonja rrinte shtrirë dhe shikonte përleshjen me qetësi. [Dh. B. p. 39]).

In the above examples, the English PP *in the meantime* shows the time of the action that was done while something else was expected, or when two actions are performed at the same time. In both sentences we have an Albanian translation the adverb of time *ndërkohë* and translation missing of *in - në*, which perhaps the translator did not use for economy of language. We think that in the example (3.2.2.3) the use of the preposition *në* would be useful, as it would stay close to the meaning of PP *in the meantime*, while the example (3.2.2.4) is sufficient.

F. English In ➡ *Albanian Nouns*

1. *But, though he worked in the sled in the day, White Fang did not forego the guarding of his master`s property in the night.* (W. F. p. 1560; (Ditën punonte me zell të madh, ndërsa natën ruante me kujdes gjërat e të zotit. [Dh. B. p. 159]).
2. *Not in a day or a generation were the ravaged sheepfolds to be forgotten.* (W. F. p. 171) (…sa për delet, edhe ditët nuk do të mjaftonin për të numëruar viktimat. [Dh. B. p. 175]).
3. *In its first week, insisted of brighter news or at least….* (D. p. 85); (Java e parë e tij, në vend të mbyllej me një lajm…[Dub., p. 82]).

From the examples above, it can be seen that PPs in English are translated with nouns into Albanian and these nouns can be in their definite form, as PP with the preposition **in** appears to be translated with feminine nouns (*ditën, natën, ditë*), singular, in accusative, definite form but the noun (*ditë*) is plural. This is the advantage of the Albanian language; because of the case endings, nouns can be used without prepositions.

G. English In ➡ *Albanian Prepositions (pas, brenda, prej, gjatë)*

The preposition **in** was found translated with the above-mentioned prepositions into Albanian:

1. *In a few minutes the train drew up beside an improvised wooden platform.* (D. p. 26); (Pas disa minutash, treni u shkund pranë një platform të sajuar. [Dub., p. 52]).
2. *And so was recorded the second epitaph in two days…* (W. F. p. 15) (…ky ishte fjalimi i dytë mortor brenda dy ditësh. [Dh. B. p. 15]).
3. *They ain`t had a bite in weeks…* (W. F. p. 16); (Vëbast se nuk kanë vënë në gojë prej javësh…[Dh. B. p. 20]).

4. *He had not eaten <u>in forty hours, and he was weak with hunger</u>*. (W. F. p. 93); (Nuk kishte futur gjën ë gojë <u>prej dyzet orësh.</u> [Dh. B. p. 97]).
5. <u>*In the meantime, they`re willin` to pick up anything` eatable that comes handy*</u>. (W. F. p. 16); (**Gjat** ë k ë saj kohe shohin se mos kushedi rastisin ndonjë gjë tjetër…[Dh. B. p. 20]).
6. <u>*In the summer*</u> *the fish failed*. (W. F. p. 107); (<u>Gjat ë ver ë s</u> nuk kishte peshk. [Dh. B. p. 111]).

In the examples with PP's showing rather shorter periods of time (with a modifier: PP = P + NP [*in a few minutes*]) is observed to be translated mainly with a PP in Albanian with the same structure (*pas pak minutash; pas disa minutash*), and here we have a similarity between two languages based on their structure. In all examples, when the preposition *in* is used to show a longer period started in the past and continued for some time or up to the moment of speaking, the PP was translated with the preposition ***prej*** which is in ablative (*prej javësh, prej dyzet orësh*). However, in sentences showing a shorter period of time (*in a day, in two days*) is always translated with the preposition ***brenda*** (*brenda një dite, brenda dy ditësh*).

In the last example, the preposition ***in*** is translated with ***gjatë***, and here we have similarity in translation and synonyms as well. The preposition ***in*** has a similar meaning to the preposition ***during*** (in/during the summer) and in Albanian as well the preposition ***në*** is similar to the preposition ***gjatë*** (*n ë ver ë/gjat ë ver ë s*).

H. English In ⟶   Translation Missing

1. *He straightened up <u>in time</u> to see a dim form disappearing across the snow into the shelter of the dark…* (W.F. p.10); (Drejtoi trupin dhe pa një hije t ë vagullt, që zhdukej në errësirën mbrojtëse…[Dh. B. p. 13]).
2. <u>*In this time*</u> *of mystery, White Fang, too, stole away into the woods*. (W. F. p. 108); (Dhe Dh ëmbi i Bardh ë iku. [Dh. B. p.112]).
3. <u>*In the meantime, the canoe had drifted down the stream*</u>. (W. F. p. 82); (Vark ë n po e merte vala dhe Kastori i Hirt ë mori drejtimin e saj. [Dh. B. p. 88]).
4. *We were to meet at ten <u>in the morning</u> on the Canal Bridge*. (D. p. 13) (…e patëm lënë të takoheshim në orën dhjet ë tek Ura e kanalit. [Dubl., p. 36]).

In the analysis of the novels, besides translations, whether with prepositions or adverbs, there were found many examples when the preposition ***in*** was not translated at all. This phenomenon was found more in the novel *White Fang* translated into Albanian and less in *Dubliners*. In *White Fang*, the translation was missing because the translator had left several paragraphs without translating, underlined PP's were not even translated, and they were not replaced by other words or phrases. We do not know the reason for these gaps, but we believe that these missing translations woud have given additional details about the actions in the story. As was seen in the examples above, some of the PP's could have been translated, especially in the last example, because in translation it is not clear (*n ë or ë n dhjet ë?*) whether the time of the action was in the morning or in the evening. Some of the examples we have already mentioned in the previous chapter when analyzing the above-mentioned Albanian prepositions. On the following page we have illustrated the frequency of use for the preposition ***in*** for both novels and their translation into Albanian.

TABLE 1.
WHITE FANG .

Translation used for analysis		Times	%
English PP with the head ***in*** used - in total		1214	100%
In denoting time		68	5.60% 100%
PP with the head ***in*** –translated into Albanian	*- with prepositions of accusative* - n ë(10)	10	14. 70%
	- other prepositions nga - 2 m ë- 2 prej - 2 gjat ë- 6 brenda - 4	13	19. 11%
	-with adverbs nes ë r - 5 nd ë r koh ë- 7 pasdite - 1	13	19. 11%
	- cases when translation missing *- conjuctions* (megjithat ë, pastaj, sapo)	25 3	36. 76%
	- nouns (nat ë n, dit ë n)	4	5. 88%

TABLE 2.
DUBLINERS

Translation used for analysis		Times	%
English PP with the head **in** used - in total		1056 - 29	100%
In denoting time		29	100%
PP with the head **in** –translated into Albanian	- with prepositions of accusative - në(10)	15	51. 72%
	- other prepositions brenda - 1 pas - 5	6	20. 68%
	- with adverbs menjëherë- 1	1	3. 44%
	- cases when translation missing	3	10. 34%
	- nouns (natën, ditën)	4	13. 79%

From the above tables, one can see that the preposition **in** is mainly translated with the preposition **në** into Albanian, adverbs of time, nouns and other prepositions, but the main burden of translation carries the preposition **në** (10 times in *White Fang* and 15 times in *Dubliners*) as no other preposition has such a high frequency of translation.

IV. PREPOSITION ON

Based on the analyzed novels, the preposition **on** is the third most used preposition after the prepositions **in** and **at**. The three prepositions, apart from other adjunctions, can express time, such as **in** and **at** which are the most specific. O**n** is the most general because the PPs *in 10 minutes* and *at 10 o`clock* are more specific than *on Monday*. So, **on** is used with days of the week and before months that are used with dates and before *that*. The preposition **on** is used to mean one day of the holiday (Swan, 2002, p. 80, 81), and if we say which morning or afternoon we are discussing about, or if we describe the morning/afternoon, etc. Regarding position in the sentence, this preposition can have all three positions (initial, middle and final positions), for example:

1. *Come and see us on Christmas Day.*
2. *What are you doing on Easter Monday?*
3. *We met on a cold afternoon in early spring.*
4. *His birthday is on October 11th.*
5. *The meeting is on 7 August.*
6. *I have to go to an interview on that day.*

The preposition **on** is also used in formal English, in expressions like these (Lindstromberg, 1997), and here preposition **on** can mean "immediately after", for example:

7. *On arriving, we went straight to the front desk.*
8. *On his arrival, the commander gave a speech to his soldiers.*
9. *I`ll bring it on Friday at 16:00. (NOT - at Friday on 16:00)*

As for the last example, as stated in the second chapter on prepositions, certain prepositions are used in one form, **on** can be left out but not the preposition **at** (*The party will meet Friday at 16:00*). When showing special meanings, prepositions (*on, in*) can both be used in a sentence: one with a correct meaning and the other one a bit awkward (*I can meet you in the house/I can meet you on the house*). When it comes to indicate time relations, this flexibility is very rarely applied. This is shown from the example above with preposition *on* and *at,* as they cannot be replaced. Therefore, prepositions denoting time can be used only with certain words or in some cases they can be left out and very rarely replaced with other prepositions.

As stated in the second chapter, prepositions are not used before some common expressions of time beginning with *next, last, this, that (sometimes) one, every, each, same, any* (in an informal style), or sometimes preposition **on** is left out before the week days. This is common in American English (Eastwood, 2005) for example:

10. *Why don`t you come for a drink (on) Monday evening?*
11. *I`ll see you (on) Tuesday.*

In other cases, we can leave out preposition ON before what/which day(s), such as:

12. *What day is your appointment?*
13. *Which day do you have your music lesson?*

A. On vs In

Although prepositions *in* and *at* express a more specific time, the PP *on time* refers to fixed time clock, and it has an idiomatic meaning as it can be more precise than *at ten o`clock*. The PP *in time* (*for/to*) means "early enough"; but PP *on time* means (Eastwood, 2005, p.307) "punctual(ly)", for example:

1. *Oh good. You`re back in time for tea.*
2. *The train left on time at 11.23.*

According to the same grammarian, these two PPs are a bit clearer in comparison with the following PP's: *in good time* and just *in time*, for example:

3. *We got back in good time for tea.* (= with plenty of time to spare)

4.   *We got there just <u>in time</u> for tea.* (= with little time to spare)

Preposition **on** is used not only with days (Monday, Tuesday, etc), but also if a day is named or specified (Lindstromberg, 1997, p. 76) such as:

5.   <u>*On the first day/the morning*</u> *I arrived, it snowed.*
6.   <u>*On the day*</u> *of the earthquake….*
7.   <u>*On the twentieth night*</u> *of Christmas my true love said to me....*
8.   <u>*In the evening*</u> *we sat around and drank beer.*
9.   <u>*On the evening*</u> *of the 9th, we were sitting around and drinking beer; suddenly…*

In the last two examples above (3.5.1.8; 3.5.1.9), the role of the preposition **on** is to make the time period more compact, therefore **on** is used as there is more information after the first PP. In all the above examples, the preposition **on** is with a complement referring to a part of a day rather than a whole day (Quirk et al., 1973).

B. Analysis of On

Preposition **on** was not found to be used very often in *White Fang,* as from the 489 times used in total, only 12 times denoted time relation. In regard to its translation, it was done with NP's more than with other prepositions.

However, different results were found in *Dubliners* as it was used 457 times in total but 24 times denoted time relation. In *Dubliners*, the preposition **on** was translated with its equivalent *të* and with nouns into Albanian, and less with other prepositions.

C. ENGLISH ON ⟶ ALBANIAN Të

1.   *And the men used to go in <u>on Sunday morning</u> before the houses…* (D. p. 120); (Dhe burrat shkonin aty çdo t<u>ë diele n ëm ëngjes</u>…. [Dubl., p. 157]).
2.   *… <u>on Saturday nights</u> had begun to weary her unspeakably…*(D. p. 31) (…për punë të hollash t<u>ë shtunave mbr ëmje</u> nis ën ta lodhnin sa s`ka. [Dubl., p. 56]).
3.   <u>*On special Sundays, when Mr. Kearny went with his family...*</u> (D. p. 80); (Disa t<u>ë diela</u> t ëve çanta, kur zoti Kirnei shkonte bashkë me familjen…[Dubl., p. 175]).

As seen in the above examples, PP's with **on** denoting days of the week along with parts of the day (*On Saturday evenings, on Sunday morning*, etc.) or without them (*On special Sundays*) appear translated always with *të,* which belongs to the nominative case. It is observed that, whether the noun is singular or plural in English (on Saturday evenings - *t ë shtunave n ëmbr ënje;* on Sunday morning - *t ë shtunave n ëm ëngjes*) the translation into Albanian is the same, meaning that the second preposition **n ë** may or may not be used, and the meaning is the same (on Saturday night - *t ë shtun ën n ë dark ë*; on Saturday night - *t ë shtun ën mbr ëna*).

As stated in the previous chapter on Albanian prepositions, the preposition **n ë** can sometimes be left out and it seems that, for language economy, the translator did not always use **n ë.**

D. ENGLISH ON ⟶ ALBANIAN NOUN

1.   <u>*On nights*</u> *when he came in very late it was, she who warmed up his dinner.* (D. p. 62); (Net<u>ëve</u> kur ai kthehej von ë, vet ë ajo ia ngrohte gjell ën e dark ës. [Dubl., p. 92]).
2.   *Six o`clock <u>on Chistmas morning</u>...* (D. p. 195); (N ë gjasht ë fiks m<u>ëngjesin</u> e krishtlindjeve! [Dubl., p. 243]).
3.   *In all the days he had lived it had not worked so hard as <u>on this one day</u>.* (W. F. p. 60; Truri i tij i vog ël nuk kishte punuar ndonj ëher ë aq shum ë sa <u>at ë dit ë</u> [Dh. B. p. 65]).
4.   *Later <u>on that day</u>, Kiche and White Fang strayed into the edge of the wood next to the camp.* (W. F. p. 80); (Nj ë <u>dit ë</u> Kisheja dhe Dh ëmbi i Bardh ë po endeshin s ë bashku n ë pyllin aty af ër. [Dh. B. p. 87]).

As can be seen from the above examples, in *Dubliners* the preposition **on** is translated with nouns that can be feminine and masculine, and they appear in their definite form, such as *nat ën* which is a feminine noun, singular in accusative case; and *m ëngjesin* - a masculine noun, singular. The first example is a noun in plural (*net ëve*), and the common characteristic is that they are in their definite form.

Regarding *White Fang*, there were five cases translated with NPs such as the last two examples above: *on this one day - at ë dit ë* and *on that day - nj ë dit ë* These are essentially the only NPs translated into Albanian, and they have modifiers (*at ë -* pronoun and *nj ë -* numeral). In almost all these cases, there is the invisible presence of the preposition *n ë.*

TABLE3.
DUBLINERS

Translation used for analysis		Times	%
English PP with the head **on** used - in total		457 - 24	100%
on denoting time		24	100%
PP with the head **on**–translated into Albanian	*- with -* t ë	14	58. 33%
	- other prepositions: me	1	4. 16%
	- nouns (3); *NP* (1)	4	16. 66%
	- cases when translation missing	2	8. 33%
	- with preposition of accusative – n ë	3	12. 5%

V. Conclusion

Prepositions, particularly temporal prepositions, are the focus of our research. The goal of this research was to have a better understanding of the differences between prepositions and how to utilize them correctly. We attempted to update the study in order to aid in ELL's acquisition of English as a foreign language, as well as the work of translators from English to Albanian and vice versa. This research included internal similarities as well as comparisons between the two languages. This raises further issues about parallels, replacement options, and differences. To explain the research, we looked at the usage of prepositions, particularly prepositional phrases with a focus on time prepositions such as *in* and *on*, and compared them to prepositions in Albanian from chosen English books.

The preposition *in* is one of the most common prepositions in English, and as previously indicated, its time meaning originates from its fundamental meaning: a "space time" long enough to be thought of as a window. Its meaning might be exact (as it was *in 2005*) or it can develop through time (*in the old days*). The fact that the preposition *in* is one of the most common prepositions is supported by our findings from novel analyses: in White Fang, only 68 of the 1214 times the preposition *in* appeared in sentences denoting time, and in Dubliners, only 27 of the 1056 instances of the preposition *in* denoted time relation. This large figure in both works demonstrates how frequently the preposition is used. In terms of translation into Albanian, we discovered that it was not generally translated with the preposition *në*, as one might assume, but rather with adverbs of time (*ndërkohë, nesër, pasdite*), with nouns (*ditën, natën*), and prepositions (*rreth, mënë, nga, gjatë pas*, etc.).

The preposition *on* was not found to be used very often in *White Fang* as, from the 489 times used in total, only 12 denoted time relation. It was translated with NP's more than with other prepositions. But we found different findings in *Dubliners,* as it was used 457 times in total but only 27 times denoted time relation. In *Dubliners*, the preposition *on* was translated with *të* and with *nouns*, and less with other prepositions.

References

[1]   Bennet, D. ((1975). *Spatial and Temporal Uses of English Prepositions*: An Essay in Stratificational Semantics. Longman, London. p.360.
[2]   Blamires, H., ((2000). *The Penguin Guide to Plain English*. Harmondsworth, Penguin.p.1.
[3]   Boquist, P. (2009). *The Second Language Acquisition of English Prepositions*. A Senior Thesis submitted in partial fulfillment of the requirements for graduation in the Honors Program Liberty University. p.8.
[4]   Essberger, J. (2012). *English Prepositions List*, England, p. 11.
[5]   Fang, A. C. (2000). Alexicalist Approach Towards the Automatic Determination for the Syntactic Functions of prepositional Phrases. *Natural language Engineering, 6*(2). p.183.
[6]   Fjalor i Gjuhës së Sotme Shqipe (Albanian Dictionary) (1981). Prishtina.p.336.
[7]   Quirk, R. & Greenbaum, S. (1973). *A University Grammar of English*. Longman Group Limited London. p.154.
[8]   Lindstromberg, S. (1997). *English Prepositions Explained*. John Benjamin`s Publishing Co. Amsterdam.p.50.
[9]   London, J. White Fang. (2005). *The project Gutenberg eBook. ♯910.*
[10]   London, Xh. (2009). *Dhëmbi i Bardhë*. Uegen. Tiranë. Translated by Mikaela Minga.
[11]   Mardale, A. (2011). *Prepositions as a Semilexical Category*. Bucharest Working papers in Linguistics, p. 35-50. halshs-00663128.
[12]   Joyce. J. (2000). *Dubliners*. Penguin Books. Reprinted in Penguin Classics 2000, 10.
[13]   Joyce, J. (2004). *Dublinasit*. Zenit Editions. Translated by Idlir Azizi.
[14]   Swan, M. (2002). *Practical English Usage.* Oxford: Oxford University Press.p.80.,201., 202.
[15]   Tyler, A. & Evans, V. (2003). *Semantics of English Prepositions*. Cambridge University Press. p.26.
[16]   Xhuvani, A. (1964). Parafjalët (*Prepositions*). Studime Filologjike 1. (Philological Studies). State University of Tirana. Albania. p.8.

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English as a Foreign Language in Saudi Arabia: Learners' Evaluation of Their Language Experience

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Abstract—This study focused on the understudied emotional side of learning. Specifically, it aimed at understanding the quality of the English learning journey of seven Saudi Arabian college students. For this purpose, a survey was conducted first to collect personal data, sociolinguistic data, curricular and other experiences in the path of learning English. Then, this was followed by three qualitative instruments to collect data presented in narratives, journals, and interviews. Qualitative data were analyzed inductively and deductively by thematic analysis. It was found that participants evaluated their English language learning journey in college using more positive emotional states than negative ones. These states, both positive and negative, affected participants' reactions towards their English experience, with pleasant encounters boosting their motivation and unpleasant encounters decreasing their motivation. Moreover, results indicated that participants were dissatisfied with their English language skills, even though they seemed to focus more on their successes than on their failures. The resulting insights can assist teachers in understanding the importance of a positive and supporting English language learning environment and its impact on increasing learners' performance and motivation.

Index Terms—Saudi Arabian EFL learners, English learning experience, affectivity, positive and negative emotions

I. INTRODUCTION

English, being the world's the lingua franca, has attracted the attention of many educators and researchers, particularly in the learning and teaching of English as a second language (L2). Many of these studies have primarily focused on cognition (Imai, 2010; Pavlenko, 2005) while minimal research has been conducted on affective aspects of L2 learning and teaching (MacIntyre & Gregersen, 2012; Oxford, 1990; Schutz & Pekrun, 2007). Dörnyei (2009, p. 219) has stated that, "everybody knows that the study of a second language can be an emotionally rather taxing experience yet affect has been an almost completely neglected topic in applied linguistics." This has persisted, despite evidence that emotion-minded tutorship increases students' motivation and positive attitudes towards the tutored topic (Begin, 1971).

However, affect, cognition, and language should not be studied separately. Emotions are not an insignificant appendix of cognitive processes and language, but rather something that helps us grasp and shape (or construct) the very essence of the human cognitive universe (Vigotsky & Kasanin, 1934).

From the perspective of component models of emotions, cognition and affect are inseparable (Scherer, 2005; Smith & Lazarus, 1993). The component models of emotions have long included subjective cognitive appraisals of events and responses (Scherer, 1993) and their behavioral expression. According to Garret and Young (2009, p. 210), "It is through experiencing the world and conducting an affective appraisal of these experiences that individuals develop their unique preferences and aversions". In other words, cognition and language are closely interrelated, which recommends against reductionist dualisms and oversimplifications (Mesquita, 2013; Scherer, 2005). This standpoint was embraced in this study.

II. LITERATURE REVIEW

A. English Language in Saudi Arabia

The only foreign language taught in Saudi Arabia (SA) is English (Alrashidi & Phan, 2015; Elyas & Picard, 2019). The Ministry of Education introduced English in a limited number of schools in the 1920s and into the general education system officially in the 1950s. At first, English was taught only in intermediate and secondary schools, as the government was concerned that it may lead to students having difficulty learning their L1. Nevertheless, with the increasing global importance of English, the government extended English education to the primary school curriculum in, 2010. This suggests the importance of teaching and learning English as a Foreign Language (EFL) in SA.

B. Research on the Context of Saudi Arabia

Past studies involving Saudi students generally focused on learning anxiety (e.g., Alrabai, 2014; Rafada & Madini, 2017) and less frequently on language learning enjoyment (Dewaele & Alfawzan, 2018). Little attention has been given to wider spectrums of affectivity, including motivation (Gardner & MacIntyre, 1993; Scherer, 2005), interactions of emotions with the learning process, learners' motivation, and learners' "self-concept of ability and academic achievement" (Pekrun et al., 2011, p. 226). The present study aims to address this research gap and explore some of these generally neglected aspects.

This study inspected the longitudinal trajectory of Saudi EFL learners, quantitatively and qualitatively, paying close attention to a wide spectrum of emotions, particularly valenced experiences, while learning English. It is important to refrain from an "objectivistic" viewpoint in the context of identifying emotions. Like most elements of the human psychological and sociological universe, emotions are an element in the wider power-knowledge interplay (Foucault, 1961; McAvoy, 2015, p. 8) and are ultimately subject to change as power-knowledge relationships change.

The dynamics of learning EFL in different contexts (classroom and elsewhere) are taken into account in this study. Additionally, the terms "emotion" and "affect" are used interchangeably in their non-academic meaning of lay or folk psychology.

III. Materials and Methods

A. Sample

This study included seven young male Saudi Arabian college students in the first year at the same Saudi Arabian community college. Their average age was 19.71 (SD=1.18). They all had been born in towns other than the one where their college was located. Their majors were accounting (N=2), computer programming (N=4), and computer networking (N=1). They reported having started their EFL studies at a mean age of 11.57 (SD=0.54). Thereafter, they all had two English classes per week in primary school and four classes per week in intermediate and high school. Their last high school grades were, on average, 87.14 (SD=7.45). They were enrolled in their first three English-medium college courses.

This sample appeared homogeneous in terms of main demographic traits and institutional English learning journey. A summary of the demographic characteristics with some degree of variability is presented in Table 1, below.

TABLE 1
PARTICIPANTS' DEMOGRAPHIC CHARACTERISTICS

Number	Age	Degree Program	EFL Learning Onset Age	Last High School Grade
#1	20	Accounting	11	85
#2	19	Accounting	12	81
#3	18	Computer Programming	11	94
#4	20	Computer Networking	12	80
#5	18	Computer Programming	11	100
#6	21	Computer Programming	12	82
#7	22	Computer Programming	12	88

B. Design

This study aimed to examine Saudi students' evaluation of their English language learning experience in Saudi Arabia. The research design was exploratory in nature and provided a detailed description of the kinds of experiences Saudi students came across during their English language journey.

C. Sampling Procedures

Convenience purposeful sampling (Neuman, 2004) was used to select participants based on their knowledge, relationships, EFL level, and accessibility to the researcher. The inclusion criteria were: Saudi Arabia nationality and residence, attendance of the first year of the selected Saudi Arabian community college and being male. Therefore, any generalization of findings to individuals with different attributes should be done with care.

After the study was approved by the ethics committee, I personally contacted male students in three English language classes in different majors at one Saudi Arabian community college. The objectives and methodology of the study were explained in Arabic to each class, and the students were informed that their answers would be anonymous and confidential. Students were then asked to participate in the study. Ten participants agreed to participate; however only seven students completed every step, due to scheduling constraints. All participants gave their written informed consent to participate in the study.

D. Data Collection Procedures

Four purpose-built instruments were utilized: surveys, narratives, journals, and interviews. The face validity of each of the items and questions within these instruments was assessed by a peer and resulted in effective changes. The second, face-validated version of every instrument was piloted with three students during a three-week period. This

helped to refine data collection procedures. Data collection lasted eight weeks. The instruments were presented in Arabic, and their answers were transcribed and translated into English before data analysis.

The instruments were presented to participants in the sequence specified at the beginning of this section. Surveys included mainly closed-ended questions and were completed face-to-face, at the college, using paper-and-pencil versions. Following the surveys, the students were asked to write a narrative about their lifelong EFL experiences and submit it via email. In addition, the participants were asked to respond via email to forwarded journal questions every weekday (Sunday-Thursday) for four consecutive weeks.

Upon completion of the journaling phase, participants took part in interviews. Accordingly, four face-to-face semi-structured interviews were carried out. Every participant was asked the same questions in the same way; however, when appropriate, prompts were used to clarify or explore the answers further.

E. Instruments and Data Analysis Procedures

The survey was the only instrument subjected to quantitative analysis. It included 26 questions in five sections: personal data, sociolinguistic data, curricular English, other experiences with the English language, and evaluation of previous English learning experiences. Microsoft Excel 2010 and IBM SPSS Statistics v.25 were then used to analyze survey data.

Personal data questions included name, age, place of birth, nationality, current university, degree program, year of study, number of English courses taken, phone number, and email address. Sociological questions inquired about family language, friends' languages, and language with which they were most comfortable. The curricular English section had five open-ended questions: age at English learning onset, frequency of classes in primary school, frequency of classes in intermediate school, frequency of classes in high school, and last high school grade. The 'Other experiences with the English language' section asked three questions, on frequency of watching TV programs in English, frequency of correspondence in English, and frequency of reading long English texts.

In addition, participants evaluated their English learning experiences in primary school, intermediate school, high school, and college. Answers were provided based on a 4-point Likert scale, from "very negative" to "very positive", with no neutral position. Before completing the survey, participants rated their overall satisfaction with their English proficiency.

The quantitative analysis included averages, standard-deviations, minimums, and maximums. Closed-ended questions were used as indicators of nominal/ordinal variables and were transferred into mutually exclusive dummy variables. For questions about language preferences, new options were created, compliant with the mutual exclusivity requirement.

As for qualitative data collected from narratives, journals, and interviews, they were uploaded as an NVivo11 Pro file. Narratives focused on English language experience in the following circumstances: before school, primary school, intermediate school, high school, college, and outside school, such as reading, working, watching movies. The final item asked participants to evaluate their overall experience with the English language.

Journals focused on how participants felt about their day-to-day English language experience, how they evaluated such experiences, and how these experiences affected them. As for interviews, they inquired about participants' overall English language experience in school and college. Participants were also asked about their future English language goals and the strategies they use to improve themselves.

F. Thematic Analysis of Qualitative Data

Participants provided 650 answers to the queries posed by qualitative instruments, totaling 6653 words. Thus, on average, their replies were brief texts with 34.29 (SD=26.82) words. The length, in words, of these texts is represented in Table 2.

TABLE 2
NUMBER OF WORDS AND ANSWERS PER QUALITATIVE DATA COLLECTION INSTRUMENT

Instrument	Journals	Narratives	Interviews	Totals
Total words	2168	2617	1868	6653
Total answers	560	48	42	650

Responses to narratives, journals, and interviews were analyzed using NVivo-aided thematic analysis (TA) (Braun & Clarke, 2006; Boyatzis, 1998). The TA process was mainly inductive or "data-driven" (Braun & Clarke, 2006, p. 96). However, when participants' comments were deemed insufficient to make sense of the data, the process was deductive, guided specifically by Scherer's (2005) approach to affect.

TA consisted of five main iterative stages (Easterby-Smith et al., 2012; Taylor & Bogdan, 1984): immersion, first-level coding, second-level coding, consistency check, and reporting. These steps were performed in sequence for each separate set of the qualitative data.

Immersion involved becoming familiar with the data by reading available material, as well as coding general structural aspects. First-level coding involved developing inductively descriptive *(What is it?)* and interpretative *(What does it mean?)* categories through a "process of comparative analysis" (Lincoln & Guba, 1985, pp. 334-341).

Second-level coding involved establishing and refining the first-level categories' relationships and proprieties (i.e., operational definition). In addition, it involved forming subthemes and themes while organizing categories into a hierarchy, with a maximum of three levels: categories, subthemes, and themes. Two analytical processes were utilized: inductive, based on meaningful contexts and operations involved in the first-level coding, and deductive, based on Scherer's (2005, pp. 714-715, 720) word-stem and dimensional proposals.

Consistency checks involved revising the consistency of the remarks included within each level of the hierarchy. This was performed while revising and improving the thematic hierarchy's coding agendas (i.e., coding rules and examples). Finally, reporting involved integrating "into a [more] coherent explanatory model" (Taylor & Bogdan, 1984, p. 126) the categories, subthemes, and themes for each separate data set.

Iterations suggested the importance of developing a single hierarchy for the three data sets. This integrated version is presented here. The data analysis process terminated when iterations started to generate fewer changes in the organization and meaning of categories, subthemes, and themes.

The names of themes, subthemes, and categories are italicized. Participants are identified by numbers, ranging from one to seven, preceded by the symbol #. The total number of the participants discussing each topic is numerically identified and preceded by the expression "N=". Similarly, the total number of the instruments discussing the topic is identified with a "Z=". These expressions ("N=" and "Z=") indicate the representativeness of categories, subthemes and themes, and how frequently they appear in the participants' narratives.

IV. RESULTS

The thematic analysis indicated an emotional side to the participants' evaluation of their English language experience. It included the static qualities of what was regarded by the participants as an 'emotion', capturing any psychological states experienced by the participants. Some of these states, as illustrated, could be understood as emotions in the classical sense (e.g., happiness and sadness). Nevertheless, many of these remarks seemed to refer to emotions as broad categories, indicative of neurophysiological states holding, potentially, an affective value (e.g., Scherer, 2005; Tracy & Randles, 2011). Examples included feeling tired, sick, active, or, as Khalid (#4, Journals) noted, "busy packing my bags".

There were long paragraphs describing that day's events without mentioning any typical or broader type of state (e.g., woke up, went to school, etc.). This was suggestive that an action as simple as waking up could, in potential, bear an affective value and thus, be regarded as an emotion. It is important to note that classifying how participants felt was quite complicated. As a result, the analysis focused on how frequently these emotions were experienced and how participants reacted to them.

A. Frequency of Emotions

Figure 1 illustrates the number of references to each emotion experienced. It shows that positive emotions were experienced more often than negative ones. This could be regarded as a crude indicator of how often the participants in this study discussed these emotions. One should note that categories most frequently discussed were, in descending order of frequency: happy; motivated; mixed and simultaneous valences; absence of negative emotions; a single state; relaxed, lazy; unwell; stressed; worried; hopeful; grateful; satisfied; sad; confused; and angry.
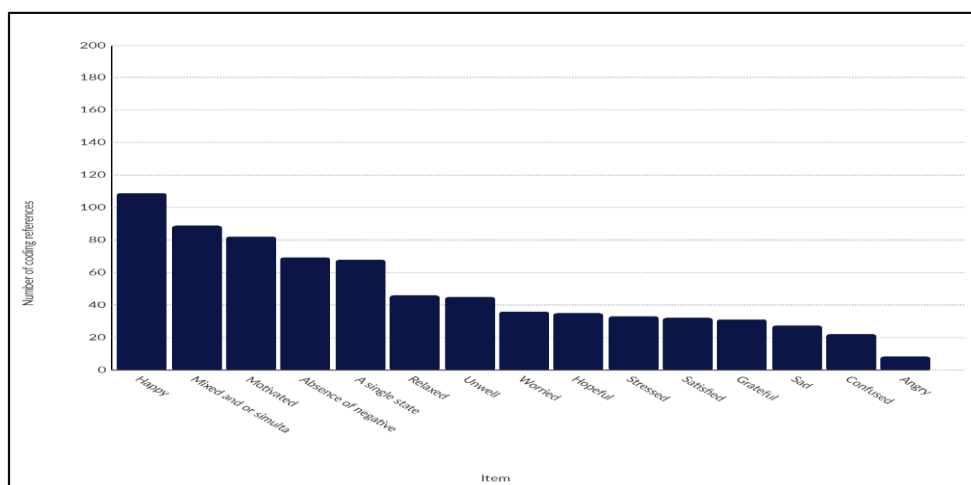
Figure 1. Frequency of Emotions

B. Frequencies of Participants' Reactions

Participants reacted differently to these emotional states. The most common denominators to the participants' reactions to pleasant and unpleasant experiences were described as types of motivational shifts. Their frequency is illustrated in Figure 2.

It can be observed that valence-congruent reactions were the most common ones. Participants' motivation was boosted in pleasant contexts (the boosted category), and it became weaker under unpleasant circumstances, as assessed by the dragged-down category. Some participants claimed that their emotional circumstances did not alter their motivation; they stayed afloat with negativity and stayed put with positivity. In more rare circumstances, they remarked valence-incongruent reactions; namely, they could become more motivated by negative emotionality and perceptions of failure, as assessed by the teased-out category. They could also become less motivated when experiencing positive emotions and perceptions of success, as assessed by 'spoiled by positivity', which was uncommon.
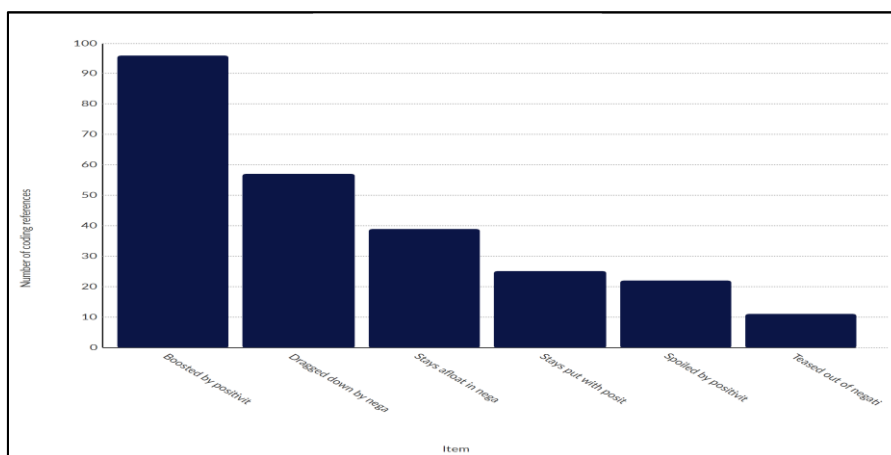
Figure 2. Frequencies of Participants' Reactions

C. Participants' Evaluation of Their EFL Experiences

The analysis of the survey provided exciting findings concerning the participants' EFL journeys and practices. It is important to note that these findings were not evidenced for or against specific qualitative observations. They could only be used as quantitative indicators of aspects that emerged qualitatively in the participants' journals, narratives, and interviews. The findings are detailed here based on the following items: First encounter with EFL, Quality of EFL classes, Language preferences, and English language activities.

1. First Encounter with EFL

The average age of first encounter with EFL was 11.57 (SD=0.49) years old, which is the age at which Saudi children finish primary school and start intermediate school. All participants acknowledged in surveys that they had two English classes per week while in primary school. Participant #4 stated that he had encountered EFL only at a qualitative level before primary school and reported no EFL in classes in primary school.

2. Quality of EFL Classes

Participants rated the intensity of their EFL experiences throughout the years. Their ratings are illustrated in Figure 3.
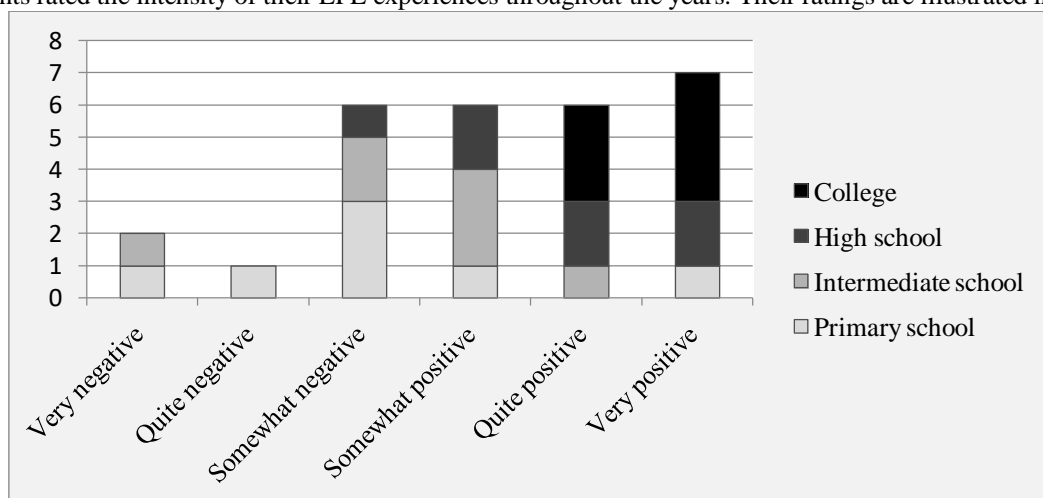
Figure 3. The Quality of EFL Classes Grade-by-grade

These findings suggested that the quality of English classes became increasingly positive as students progressed through the school grades, with the number of students giving positive ratings (four or above) being as follows: two for primary classes, four for intermediate classes, six for the high school, and seven (all) for college.

Participants' evaluation of their grades did not show a rising positive trend. However, the findings revealed that students were more pleased with their EFL classes in college than any other school grade. This was observed through all findings, as participants felt that college was the only period during which EFL learning was practical. It was also found that English was more valued personally and socially by some participants in college than at any other stage. Therefore, it could be concluded that EFL encounters in college were generally viewed as emotionally positive, which was not the case with EFL encounters in school.

3. Overall Satisfaction with English Level

Participants were inquired to rate their satisfaction with their skills. Only #2 was "quite satisfied" with his English level. The majority were displeased with their proficiency, with four claiming to be "only partially satisfied" (#3, #5, #6, and #7) and two "not at all satisfied" (#1 and #4) with their current skills. These students generally felt that their skills were poor or expected much improvement. Findings also showed a trend in participants' journals and narratives, in which some comments were made regarding success rather than failure. Even though almost every participant was dissatisfied with their skills, they seemed to focus more in the journals and narratives on their successes than on their failures.

4. Language Preferences

Every respondent reported speaking Arabic while socializing at home and most felt more comfortable speaking in Arabic (N=5) than in English or any other language. Moreover, the majority claimed to speak only Arabic (N=5), while two (#5 and #7) claimed to speak both Arabic and English while socializing with friends. The survey also found that two participants who only spoke Arabic among relatives and friends claimed to feel more comfortable than before in speaking both Arabic and English (N=2).

Qualitative findings did not detect language preferences or habits. There were some instances when things were inconsistent. Specifically, four participants (#1, #3, #4, and #7) claimed to have relatives who helped them with their English at home. Thus, at least in certain circumstances, to develop their EFL skills, participants spoke English at home. Additionally, five respondents (#1, #2, #4, #6, and #7) mentioned speaking English with their friends, peers, and other casual acquaintances, and three used the term, "friend" (#1, #4, and #6) to describe the interlocutor. Note that none of those who acknowledged using English with friends quantitatively used this term in their qualitative narratives, and only #7 acknowledged speaking English with friends in both approaches.

5. English Language Activities

The participants were asked about the frequency of their engagement in the following activities: watching English TV programs, written correspondence in English, and reading long English texts. Figure 4 illustrates the results.

Figure 4. English Language Activities
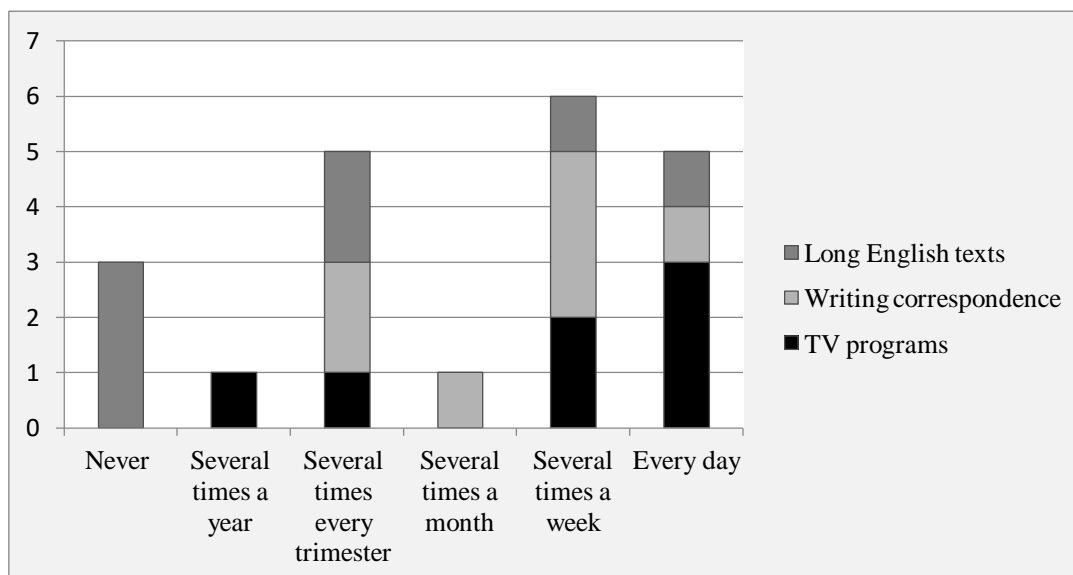
As can be observed, the most common activity was watching English TV programs, with five participants doing so several times a week (N=2) or daily (N=3) and none claiming to never do so. Findings relating to this category were congruent with these quantitative results, with participants discussing the use of audio and audio-visual resources for boosting their study motivation and skills.

Quantitatively, four participants, #3, #5, #6 and #7, claimed to read long texts in English more often than never. In addition, #3 and #7 mentioned reading books and long texts in both parts of the study. However, #1 acknowledged reading qualitatively, but claimed to "never" read long texts in the survey, while #6 did not mention reading qualitatively but did so in the survey, and #5 acknowledged reading long texts in the survey. As such, the results were not congruent for this activity.

V. DISCUSSION

A. EFL in Saudi Arabia

As expressed by participants, English was undervalued socially and personally during some school grades. However, all students agreed that English was valued as a necessity in college and effectively and pleasantly learned. Rahman and Alhaisoni (2013) suggested that Saudi students viewed English as a futile requisite within a system that placed little emphasis on mastering the language. Present findings limit the generalizability of this claim to the college environment. Themes such as *the value of English* refer specifically to this conclusion. The necessity of English was supported and contextualized in the college environment (Al-Saraj, 2014a, 2014b; Dewaele & Al-Saraj, 2015).

The implication is that social circumstances affected how participants felt about their English language experience. It was found that EFL classes in college were more pleasing and effective than classes in school. EFL education in Saudi educational institutions has changed considerably in the last decade. We may expect to see significant improvements, particularly in light of the Saudi Ministry of Education's decision to introduce English from the first grade of primary school (Bhuiyan, 2016).

All participants identified positive English experiences unrelated to official education. Moreover, *unpleasant encounters* did not include any activity which was exclusively performed outside the school context. These findings supported Piniel and Albert's (2018) conclusions that negative emotions such as anxiety were more common inside the classroom, rather than positive ones such as enjoyment and relaxation.

Piniel and Albert (2018) did not posit the existence of any cause-effect relationships. Similarly, in the present study, the situations associated with positive and negative emotional states, which corresponded to *pleasant* and *unpleasant encounters*, could be claimed to be the causes of positive vs. negative emotions. Participants most often did not establish causal links between their states and different situations. Therefore, these subthemes were offered as only one of many descriptions of participants' experience with EFL.

The themes and corresponding circumstances echoed previous findings on the relationship between EFL performance and subjective evaluation of EFL that suggested that students' amusement or joy improved EFL performance, particularly when compared with anxiety. Conversely, negative emotions are prejudicial to EFL performance, as noted by various other authors (Al-Saraj, 2014b; Dewaele & Alfawzan, 2018; Ismail, 2015).

Götz and Hall noted that "Pleasant emotions (e.g., enjoyment, pride) are positively related to achievement, whereas unpleasant emotions (e.g., anxiety, boredom) are negatively related" (p. 192). This means that the pattern outlined in this study may be generalizable to cultures other than Saudi Arabia. As such, positive emotions seem to impact learning trajectories and performance more markedly and extensively than negative ones. Therefore, encouraging *pleasant encounters* through experiences could be an efficient pedagogic strategy, more beneficial than attempting to minimize aspects of *unpleasant encounters*. Finally, positive aspects, which facilitate learning and performance, should be explored together with students.

B. EFL Learner Experiences

The Saudi Arabian students expressed their dissatisfaction with their English level. The majority of students (6 students) were unsatisfied with their level and generally perceived that their skills needed to be promoted. These findings are compatible with those of Hung et al. (2016), who showed that it was surprising for Asian students to present their language skills with relatively lower satisfaction ratings than others, due to their willingness and cultural norms. Regardless of this, most respondents preferred to speak Arabic only as their mother tongue (N=5), while some reported being bilingual in Arabic and English (N=2). Also, five respondents claimed that the most common activity was watching English TV programs, doing so several times a week (N=2) or daily (N=3), and none of them reported "never". Findings related to this category are aligned with arguments in the paper by Al-Athwary and Laslom (2021) and proved that audio-visual inputs assisted students and teachers in crafting their English quality, especially in listening comprehension.

VI. CONCLUSIONS

A. Summary

English learning experiences of the participants differed when recollecting what had been learned in each grade. The exceptions were primary school and college. Both at quantitative and qualitative levels, participants mentioned that first encounters with EFL happened during primary school through acquiring passive skills, such as the alphabet.

In college, due to English becoming a mandatory subject, every participant started to value EFL. All believed they had developed both passive and active skills during college and noted that language classes had a superior quality.

Quantitative findings supported the latter observation by showing that participants felt that the quality of their EFL classes increased over time, reaching a maximum in college. Among language activities, watching English TV programs was the most popular activity among the respondents and establishing *audio and audio-visual resources* aided them to promote study motivation and skills.

B. Limitation and Trustworthiness Considerations

The findings of this study have to be seen in the light of some limitations. The first is that there were instances in which the findings did not converge so neatly. For example, when participants were asked about writing in English, it was found that they engaged in this activity, and four did so rather frequently, either several times a week (N=3) or daily (N=1). However, only two participants discussed the importance of written English correspondence in the survey. #7, Narratives, mentioned one occasion when he talked to people online and #3, Journals, described reading (as opposed to written correspondence) once: "My granddad helped me read some letters in English". Nevertheless, these references were not frequent enough to accept them as a new category.

Another example can be found concerning reading in English. Respondents #1, #3, and #7 discussed the usefulness of **books** (Z=2; N=3) (gathered from our qualitative data). Quantitatively, four participants, #3, #5, #6, and #7, claimed to read long texts in English more often than 'never'. #3 and #7 mentioned reading **books** and one **long text** in both parts of the study. However, #1 mentioned reading English texts in the qualitative part of the study but claimed to "never" read long texts in the survey; #6 did not mention reading qualitatively but did so in the survey, and #5 acknowledged reading long texts in the survey. The results across these approaches were not entirely congruent when it came to English reading and writing.

These findings raised questions about the study's trustworthiness. There may be explanations for these disparities, which would involve a closer examination of participants' issues that may have arisen during the study. Inconsistent responses in the context of self-report surveys may arise due to a plethora of factors, such as the lack of motivation, higher age, lower education, etc. Even such data as age and gender are often misreported (Akbulut, 2015; Coste et al., 2013; Huang et al., 2012).

C. Implications for Teaching English in Saudi Arabia

Learning English in Saudi Arabia has become essential, particularly in light of the country's 2030 Vision. It is a necessity nowadays, as it equips learners with numerous opportunities in the higher education, business, communications, and media sectors. Even though the data gathered in this study are based on only seven students, the findings present valuable new insights into Saudi Learners' own evaluation of their English language experience, along with how they felt about this experience.

I hope the findings can be of assistance to teachers, researchers, and policymakers, enabling them to comprehend the role of emotions and motivation in language learning. Findings can help raise awareness of the key role that emotions play in learners' English language experience and motivation. It was clear from the findings that participants significantly improved in college because they experienced more positive emotions in a constructive and supportive learning environment. As a result, Saudi teachers must create a positive and supporting English language learning environment, which will enhance students' English language performance.

Moreover, findings will allow Saudi teachers to understand learners' emotions and attitudes and provide helpful information regarding their learners' needs and experiences. Teachers will be able to know how students feel about learning English and the kinds of emotions they experience in the classroom. They will understand what factors influence and strengthen learners' performance and motivate them to enhance their English language skills. This will help teachers identify appropriate teaching methods and materials which will enhance students' motivation to learn and improve their overall English language skills, allowing them to truly enjoy the process of learning English.

Finally, with positive changes taking place in the Saudi educational system, particularly with respect to teaching English from the first grade of primary school starting from 2021, there must be a greater focus on the classroom environment and the quality of English language exposure. Teachers must do their best to create engaging and positive learning environments and employ effective and interesting teaching methods. This will ensure that the learners' engagement with English will be optimal, and their motivation will be high, which will, in turn, allow them to master most language skills from an early age.

REFERENCES

[1] Akbulut, Y. (2015). Predictors of inconsistent responding in web surveys. *Internet Research, 25*(1), 131–147. https://doi.org/10.1108/IntR-01-2014-0017/full/html
[2] Al-Athwary, A. A. H. & Laslom, N. M. (2021). Second language listening comprehension gain from aural vs. audio-visual inputs: the case of EFL Arab learners. *Journal of Language Teaching and Research, 12*(6), 911-921. https://doi.org/10.17507/jltr.1206.07
[3] Alrabai, F. (2014). A model of foreign language anxiety in the Saudi EFL context. *English Language Teaching, 7*(7), 82–101. https://doi.org/10.5539/elt.v7n7p82
[4] Alrashidi, O. & Phan, H. (2015). Education Context and English teaching and learning in the Kingdom of Saudi Arabia: An overview. *English Language Teaching*, *8*(5), 33–44. https://doi.org/10.5539/elt.v8n5p33

[5]   Al-Saraj, T. M. (2014a). Revisiting the foreign language classroom anxiety scale (FLCAS): The anxiety of female English language learners in Saudi Arabia. *L2 Journal, 6*(1), 50–76. https://doi.org/10.5070/L26121650

[6]   Al-Saraj, T. M. (2014b). Foreign language anxiety in female Arabs learning English: Case studies. *Innovation in Language Learning and Teaching, 8*(3), 257–278. https://doi.org.10.1080/17501229.2013.837911

[7]   Begin Y (1971). *Evaluative and Emotional Factors in Learning a Foreign Language*. ERIC. Retrieved October 24, 2021, from https://eric.ed.gov/?id=ED055533

[8]   Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

[9]   [9] Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development.* Sage Publications.

[10] [10] Bhuiyan, A. A. M. (2016). Motivation of Saudi Arabia Tertiary Level Students Learning English as a Foreign Language. *IIUM Journal of Educational Studies*, *4*(2), 70-84. https://doi.org/10.31436/ijes.v4i2.130

[11] Coste, J., Quinquis, L., Audureau, E., & Pouchot, J. (2013). Non response, incomplete and inconsistent responses to self-administered health-related quality of life measures in the general population. *Health and Quality of Life Outcomes, 11*(44). https://doi: 10.1186/1477-7525-11-44

[12] Dewaele, J.-M. & Alfawzan, M. (2018). Does the effect of enjoyment outweigh that of anxiety in foreign language performance? *Studies in Second Language Learning and Teaching, 8*(1), 21-45. http://dx.doi.org/10.14746/ssllt.2018.8.1.2

[13] Dewaele, J.-M. & Al-Saraj, T. M. (2015). Foreign language classroom anxiety of Arab learners of English: The effect of personality, linguistic and sociobiographical variables. *Studies in Second Language Learning and Teaching, 5*(2), 205–228. https://doi.org/10.14746/ssllt.2015.5.2.2

[14] Dörnyei, Z. (2009). *The psychology of second language acquisition*. Oxford, UK: Oxford University Press.

[15] Easterby-Smith, M., Thorpe, R., & Jackson, P. R. (2012). *Management research* (4th ed.). Sage Publications.

[16] Elyas, T. & Picard, M. (2019). A brief history of English and English teaching in Saudi Arabia. In C. Moskovsky & M. Picard (Eds.), *English as a foreign language in Saudi Arabia: New insights into teaching and learning English* (pp.78-92). Routledge.

[17] Foucault, M. (1961). *Madness and civilisation* (Richard Howard, Trans.). Routledge.

[18] Gardner, R. C. & MacIntyre, P. D. (1993). A student's contributions to second-language learning. Part II: Affective variables. *Language Teaching, 26*(1), 1–11. https://doi.org/10.1017/S0261444800000045

[19] Götz, T. & Hall, N. C. (2013). Emotion and achievement in the classroom. In J. Hattie & E. M. Anderman (Eds.), *International guide to student achievement* (pp. 192-195). Routledge.

[20] Huang, J. L., Curran, P. G., Keeney, J., Poposki, E. M., & DeShon, R. P. (2012). Detecting and deterring insufficient effort responding to surveys. *Journal of Business Psychology, 27*, 99–114. doi: 10.1007%252Fs10869-011-9231-8.

[21] Hung, L. W., Gillespie, K., Liang, S., Schwartz, R., Chung, S., & Halley, M. C. (2016). Understanding Asian patients' lower satisfaction with health care. *Journal of Patient-Centered Research and Reviews, 3*(3), 179–180. https://doi.org/10.17294/2330-0698.1302.

[22] Imai, Y. (2010). Emotions in SLA: New insights from collaborative learning for an EFL classroom. *The Modern Language Journal, 94*(2), 278–292. https://doi.org/10.1111/j.1540-4781.2010.01021.x

[23] Ismail, N. M. (2015). EFL Saudi students' class emotions and their contributions to their English achievement at Taif University. *International Journal of Psychological Studies, 7*(4), 19–42. https://doi.org/10.5539/ijps.v7n4p19

[24] Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.

[25] MacIntyre, P. & Gregersen, T. (2012). Affect: The role of language anxiety and other emotions in language learning. In S. Mercer, S. Ryan, & M. Williams (Eds.), *Psychology for language learning* (pp. 103-118). Palgrave Macmillan.

[26] McAvoy, J. (2015). From ideology to feeling: Discourse, emotion, and an analytic synthesis. *Qualitative Research in Psychology, 12*(1), 22–33. https://doi.org/10.1080/14780887.2014.958357

[27] Mesquita, G. R. (2013). Vygotsky and the theories of emotions: In search of a possible dialogue. *Psicologia: Reflexão e Crítica 25*(4). doi: https://doi.org/10.1590/S0102-79722012000400021

[28] Neuman, W. L. (2004). *Basics of social research: Quantitative and qualitative approaches*. Pearson Education.

[29] Oxford, R. (1990). *Language learning strategies: What every teacher should know*. Heinle & Heinle.

[30] Pavlenko, A. (2005). Bilingualism and thought. In J. Kroll & A. M. B. De Groot (Eds.), *Handbook of bilingualism: Psycholinguistic approaches* (p. 433–453). Oxford University Press.

[31] Pekrun, R., Goetz, T., Frenzel, A. C., Barchfeld, P., & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The achievement emotions questionnaire (AEQ). *Contemporary Educational Psychology*, *36*(1), 36–48. https://doi.org/10.1016/j.cedpsych.2010.10.002

[32] Piniel, K. & Albert, A. (2018). Advanced learners' foreign language-related emotions across the four skills. *Studies in Second Language Learning and Teaching, 8*(1), 127–147. https://doi.org/10.14746/ssllt.2018.8.1.6

[33] Rafada, S. H. & Madini, A. A. (2017). Major causes of Saudi learners' speaking anxiety in EFL classrooms. *International Journal of English Language Education, 5*(1), 54–71. https://doi.org/10.5296/ijele.v5i1.10645

[34] Rahman, M. M. & Alhaisoni, E. (2013). Teaching English in Saudi Arabia: Prospects and challenges. *Academic Research International*, *4*(1), 112. https://www.researchgate.net/publication/337768264_Teaching_of_English_in_Saudi_Arabia_Prospects_and_Challenges

[35] Scherer, K. R. (2005). What are emotions? And how can they be measured? *Social Science Information, 44*(4), 695–729. https://doi.org/10.1177%2F0539018405058216

[36] Schutz, P. A. & Pekrun, R. (2007). Introduction to emotion in education. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 3-10). Academic Press.

[37] Smith, C. A. & Lazarus, R. S. (1993). Appraisal components, core relational themes, and the emotions. *Cognition and Emotion, 7*(3-4), 233–269. https://doi.org/10.1080/02699939308409189

[38] Tracy, J. L., & Randles, D. (2011). Four models of basic emotions: a review of Ekman and Cordaro, Izard, Levenson, and Panksepp and Watt. *Emotion review, 3*(4), 397-405. https://doi.org/10.1177%2F1754073911410747

[39] Taylor, S. J. & Bogdan, R. (1984). *Introduction to qualitative research methods: The search for meanings*. John Wiley & Sons.

[40] Vigotsky, L. S. & Kasanin, J. (1934). Thought in schizophrenia. *Archives of Neurology & Psychiatry, 31*(5), 1063–1077. https://doi:10.1001/archneurpsyc.1934.02250050181009

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Syntactic, Semantic and Discourse Effects on the Processing of Scrambled Japanese Sentences

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Abstract—**In Japanese sentences, the default word order is 'subject-object-verb' (SOV). However, Japanese allows scrambling of noun phrases (NPs), for example 'object-subject-verb' (OSV) as opposed to the unscrambled default order. Two self-paced reading experiments in the moving window paradigm were conducted to test the effects of syntax, semantics and discourse in native Japanese and native English speakers' processing of scrambled Japanese sentences. The first experiment examined how the syntactic factor (NP order) and semantic factor (NP animacy) affect processing of Japanese sentences. Results revealed that animacy difference between the subject-NP and object-NP contributes more to native English speakers' processing than default SOV word order, whereas no such difference was found for native Japanese speakers. The second experiment examined the discourse effect in processing of scrambled OSV sentences. The experiment revealed that the processing of Japanese scrambled sentences is facilitated by the preceding context for both native Japanese and English speakers.**

Index Terms—**word order, animacy, discourse, Japanese, English speakers**

I. INTRODUCTION

In the field of second language acquisition (SLA) research, the interface hypothesis maintains that it is generally difficult to acquire a second language (L2) grammar at 'interface', which can be defined as the interaction or mapping between different levels of linguistic representation such as discourse and syntax or between different linguistic modules such as syntax and semantics (Sorace, 2006; White, 2011). This study explored phenomena at the interfaces of syntax, semantics and discourse in Japanese sentences in terms of the native Japanese speakers' and native English speakers' processing of scrambled Japanese sentences. Their processing of scrambled sentences was evaluated as a function of the effects of semantic factors from lexical animacy and syntactic factors from word order, with a grammar-external discourse component.

II. SYNTACTIC FACTOR: WORD ORDER

In order to process and comprehend sentences, a parser needs to know the grammatical relationships of the noun phrases (NPs) such as the subject or object. Gass (1989) lists four cues for finding the grammatical relationships of arguments, which are lexical items, morphological case markers, word order, and prosody. Also, Bates and MacWhinney (1989) suggest the competition model, which argues that parsers compute the most probabilistic interpretation based on various cues including word order, case marker, semantic information, and so forth. According to the competition model, different languages rely on different cues. Regarding Japanese and English, one big difference in the use of the cues is the case markers and word order. English (which is an SVO language) is a fixed word-order language in terms of the order of the subject, verb and object. On the other hand, Japanese (which is an SOV language) allows scrambling of the order of the subject and object (for example, OSV). Examples are shown below, which indicates that the order of subject and object is fixed in English but free in Japanese.

(1)　　a. Unscrambled sentences

English:	John ate pasta.		
Japanese:	*John-ga*	*pasta-o*	*tabeta.*
	John-NOM	pasta-ACC	ate
	'John ate pasta.'		

　　b. Scrambled sentences

English:	*Pasta ate John.[1]		
Japanese:	*Pasuta-o*	*Jon-ga*	*tabeta.*
	pasta-ACC	John-NOM	ate
	'John ate pasta.'		

In Japanese, what makes it possible to scramble the subject and object are the case markers (such as the nominative and accusative markers, *ga* and *o*, in (1) above). Since the case markers indicate NPs' grammatical roles such as the subject or the object, the order of the NPs is relatively free in Japanese. English does not utilize case markers, and the flexible order of the subject and object (OS order) is considered ungrammatical. Thus, English-speaking learners of L2

Japanese may be prone to overlook case markers when reading Japanese sentences and misinterpret scrambled OSV Japanese sentences as the default SOV sentences.

Numerous studies have been conducted on scrambling in Japanese. As for the comprehension of scrambled sentences by adult speakers, in Yamashita's (1997) self-paced reading experiment, adult native Japanese-speaking participants read scrambled OSV sentences as quickly as unscrambled sentences with default SOV word order possibly because the participants utilized information from case markers independently of the word order. On the other hand, another research suggests that scrambled sentences incur increased processing costs for adult native speakers. Mazuka, Itoh and Kondo's (2002) self-paced reading experiment showed that adult Japanese speakers' reading time slowed down when they read a subject-NP that came after an object-NP in scrambled sentences, i.e., the reading speed slowed down at 'Jon-ga' in the sentence, 'Pasuta-o Jon-ga tabeta' ('John ate pasta') as in (1).

Among studies with Japanese children, Hakuta (1982) and Lakshmann and Ozeki (1996) found that Japanese children at the age of 2-6 strongly tend to produce unscrambled/default SOV word-order sentences in their picture description tasks. However, participating children correctly produced scrambled OSV sentences when requested to start the description with the object-NP. It was therefore concluded that Japanese children did indeed have some grammatical knowledge of scrambling. In contrast, many other studies observed that native Japanese children below the age of five often misinterpreted scrambled OSV sentences as if they were SOV sentences, and never misinterpreted SOV as OSV (Hayashibe, 1975; Sano, 1977; Hakuta, 1982). These studies found that L1 Japanese children rely on the default SOV word order of Japanese sentences, paying less attention to the case markers.

Hayashibe (1975) explains that native Japanese-speaking children tend to interpret the first NP as the agent and the second NP as patient. This explanation is similar to an SLA account, the First Noun Principle (VanPatten, 1996; VanPatten 2004). The First Noun Principle argues that L2 learners tend to interpret the first NP that they encounter in a sentence as a subject and an agent. Kilborn and Ito (1989), in their experiment on sentence comprehension, found that native English-speaking L2 Japanese learners resorted to SOV word order, paying less attention to the case markers, just as native Japanese children in some earlier studies. Similarly, Iwasaki (2003) tested the L2 Japanese production of native English speakers in a picture-description task. She found that the participating native English speakers always produced the unscrambled/default SOV sentence and did not produce the scrambled OSV sentences. She also found that participants performed significantly more poorly on OSV sentences than on SOV sentences in a fill-in-the-blank-with-case-markers task. Also, Koda (1993) tested learners of L2 Japanese, whose L1s were English, Chinese and Korean. English and Chinese are fixed word-order languages, and Korean is a case-marking language that allows scrambling. The results showed that Chinese and English speakers performed poorly in comprehending scrambled Japanese OSV sentences, but Korean speakers performed equally well in comprehending unscrambled SOV sentences and scrambled OSV sentences. These results implied that, contrary to the First Noun Principle, a learner's L1 could facilitate or interfere with interpretation.

III. SEMANTIC FACTOR: ANYMACY

Clahsen and Felser (2006) maintain the Shallow Structure Hypothesis, which argues that L2 learners process the target language by using semantic information derived from the argument structure of the verb; not by using information from syntactic structure. In other words, learners' syntactic parsing of L2 sentences is shallow, and semantic information is relied on more in their comprehension of L2 sentences. A semantic factor related to the comprehension of the scrambled Japanese sentence is animacy. For example, when native English speakers read a scrambled OSV Japanese sentence such as 'Pasuta-o Jon-ga tabeta' ('John ate pasta') in (1), understanding that John is an animate entity and pasta is an inanimate entity, the parsers would know 'John' is who ate something and 'pasta' is what is eaten, even without paying attention to the case markers or word order. The animacy of the NP could therefore be used as a cue to identify the subject/agent and object/patient. This might be true in L1 sentence processing as well. The "good-enough parsing" account (Ferreira & Stacy, 2000; Ferreira, Bailey & Ferraro, 2002) claims that parsers do just enough processing to come up with a plausible meaning. When a parser is given three pieces of information such as 'John', 'pasta' and 'ate', it is easy for them to construct a plausible meaning, 'John ate pasta', based on semantic information from the NPs and the verb. On the other hand, studies such as Omaki and Schulz (2011) and Hara (2009a, b) argue that L1 and L2 speakers' syntactic analysis of a target sentence goes deeper than the lexical-semantic information.

Note that the Shallow Structure Hypothesis and the good-enough parsing account would not apply when both the subject-NP and object-NP are animate, as in the Japanese sentence, 'Mearii-o Jon-ga hometa' ('John praised Mary'). As Caluianu (2005) states, NP-animacy could cause ambiguity when it does not resolve semantic distinctions. In order to accurately process this type of sentence, parsers would have to pay attention to the case markers.

Overall, both syntactic factors (e.g., word order) and semantic factors (e.g., animacy) could affect parsers' comprehension/processing of sentences. In processing Japanese sentences, scrambled word order might be more difficult to process, and an animacy difference between the subject-NP and object-NP could facilitate their processing. The first experiment of the current study examined how the syntactic and semantic factors interact, to determine which is more or less influential of native Japanese speakers' and learners' processing.

IV. DISCOURSE FACTOR: DEFINITENESS AND PRECEDING CONTEXT

Another factor relevant to the processing of scrambled sentences is the discourse context. Masunaga (1983) argues that scrambled sentences are more acceptable when the fronted object-NP is a definite NP. In other words, (2b) is more acceptable than (2a) in the examples shown below.

(2)   a.   Pasuta-o   Jon-ga   tabeta.
            pasta-ACC   John-NOM   ate
            'John ate pasta.'
       b.   Sono   pasuta-o   Jon-ga   Jon-ga   tabeta.
            that   pasta-ACC   John-NOM   ate
            'John ate that pasta.'

Masunaga argues that the fronted definite object-NP performs a 'bridging function (p. 456)' between the preceding discourse context and the current sentence, establishing the topic of the current sentence. With the definiteness of the fronted NP, parsers assume that it refers to an entity in the preceding context and continues to be the current topic. Otsu (1994) also noted this effect. In his study with native Japanese children, although they initially misinterpreted scrambled OSV sentences to be unscrambled SOV when the sentence was presented by itself, they comprehended scrambled and unscrambled sentences equally accurately when preceding context with a referent to the fronted object was provided. An example is shown below. Children misinterpreted the sentence in (3a), but accurately understood the sentences in (3b), although the sentence in (3a) and the second sentence in (3b) were both scrambled.

(3)   a. Ahiru-o   kame-ga   oshimashita.
       duck-ACC   turtle-NOM   pushed.
       'A turtle pushed a duck.'
     b. Kooen-ni ahiru-ga   imashita.   Sono ahiru-o   kame-ga   oshimashita
       park-at   duck-NOM existed   that   duck-ACC   turtle-NOM   pushed
       'There was a duck at the park. A turtle pushed that duck.'

Otsu's argument implies that context motivates scrambling movements. According to Masunaga again, the object-NP is moved to the front in order to bridge the current sentence and preceding context, and in order to establish the topic of the current sentences. In that case, the fronted object-NP must be a definite NP because it is already mentioned in the previous sentence. This operation of fronting the object-NP is similar to passivization in English, in which the object is moved to the front to become the subject, when it is the topic or theme of the sentence, which Keenan called 'foreground operation' (Keenan, 1985). The second experiment of the current study therefore examined how discourse factor (preceding context and definiteness) interacts with the syntactic factor, i.e., word order.

V. EXPERIMENT ONE

Previous chapters suggested syntactic factor, semantic factor, and discourse factor which may affect processing of Japanese scrambled sentences. Experiment 1 investigated the first two factors, syntactic factor and semantic factor, which are reflected by word order and animacy of NPs, respectively.

A. Participants

Twelve native Japanese speakers and eleven native English speakers from the University of South Carolina participated in Experiment 1. The native English-speaking participants were L2 Japanese learners, enrolled in Japanese language classes at the University.

B. Materials

For Experiment 1, the independent variables were word order and animacy of the subject-NP and the object-NP. These were presented on a computer screen to participants as four experimental Japanese sentences (shown below).

(4)   a. Unscrambled SO word order, with Animacy difference (S[+animate] O[–animate])
         e.g.   Jon-ga   pasuta-o   tabeta.
                John-NOM   pasta-ACC   ate
                'John ate pasta.'
     b. Unscrambled SO word order, with No animacy difference (S[+animate] O[+animate])
         e.g.   Jon-ga   Mearii-o   hometa.
                John-NOM   Mary-ACC   praised
                'John praised Mary.'
     c. Scrambled OS word order, with Animacy difference (O[-animate] S[+animate])
         e.g.   Pasuta-o   Jon-ga   tabeta.
                pasta-ACC   John-NOM   ate
                'John ate pasta.'
     d. Scrambled OS word order, with No animacy difference (O[+animate] S[+animate])
         e.g.   Mearii-o   Jon-ga   hometa.
                Mary-ACC   John-NOM   praised
                'John praised Mary.'

In the items above, (4a) provides both the unscrambled word order and animacy difference as comprehension cues; (4b) provides the unscrambled word order as the cue; (4c) provides animacy difference as the cue; and (4d) provides neither cue. Also, in order to eliminate any potential influence of word or sentence length, all experimental sentences consisted of three words (subject, object and verb), and all words were short enough to allow for participants' concurrent fixation. In addition, the Japanese sentences were shown with an English translation of each content word to eliminate possible error due to word unfamiliarity. An example question as it appeared on the computer screen is shown below.

(5)   ジョン(John)が　パスタ(pasta)を　食べた(ate)。

There were 60 experimental sentences (15 for each condition of (4a), (4b), (4c) and (4d)) and 80 distractor sentences. All verbs in the experimental sentences were transitive verbs, and the verbs in the distractor items were intransitive verbs or be-verbs. All sentences were in the past tense. The experimental and distractor sentences were given in random order. After participants read each item sentence, a comprehension question was then provided in English on a computer screen, as shown below.

(6)   Q: Which is the correct translation of the previous sentence? Press '1' or '2'.
　　　　　　1. John ate pasta.
　　　　　　2. Pasta ate John.

C. Procedure

The sentences were given in the self-paced reading design in the moving-window paradigm using E-prime software, whereby participants read the sentences word by word. The experiment was carried out with each participant viewing the sentences on a computer. During the experiment, the participants first received the welcome message and instructions on the computer screen, and proceeded to a practice block by hitting the space bar. The practice block consisted of four sentences. After they finished the practice block, they received an end-of-practice message and were prompted to begin the actual experiment by hitting the space bar. In both the practice block and actual experiment, each sentence appeared after a fixation mark, '+', was shown for 1500ms on the left side of the screen, where the first letter of the experimental or distractor sentence appeared. After participants read all the words in each sentence, the comprehension questions were shown. Participants answered the question by hitting '1' or '2', and then the fixation mark '+' appeared, which was followed by the first word of the next sentence.

D. Data Analyses

The dependent variables were (i) accuracy of processing, which was assessed by the score of the comprehension question and (ii) the reading times per sentence and per word. The paired T-test was used to compare the accuracy and reading times between the unscrambled SO sentences (4a, 4b) vs. the scrambled OS sentences (4c, 4d), and between the sentences with the subject-object animacy difference (4a, 4c) vs. the sentences with no animacy difference (4b, 4d). If the participants' performance for the unscrambled SO sentences (4a, 4b) was significantly better than the scrambled OS sentences (4c, 4d), that would indicate that word order significantly affected the participants' processing. Also, if the participants' performance for the sentences with the subject-object animacy difference (4a, 4c) was significantly better than the sentences without animacy difference (4b, 4d), that would indicate that animacy of NPs significantly affected their processing.

VI. Results: Experiment One

A. Native Japanese Speakers

The mean values and standard deviations of reading times and accuracy rates in the results from the native Japanese speakers are summarized in the table below.

TABLE 1
NATIVE JAPANESE SPEAKERS' ACCURACY SCORE AND READING TIMES IN EXPERIMENT ONE

Conditions and Example sentences	Accuracy (%) [SD]	Reading time (msec) [SD]	
Unscrambled, Animacy difference e.g., (4a) Jon-ga pasuta-o tabeta. 'John ate pasta.'	99.44 [0.87]	Sentence 1st NP (animate Subj) 2nd NP (inanimate Obj) Verb	2346.83 [598.69] 826.78 [233.11] 762.88 [191.33] 757.17 [253.87]
Unscrambled, No animacy difference e.g., (4b) Jon-ga Mearii-o hometa. 'John praised Mary.'	97.78 [1.48]	Sentence 1st NP (animate Subj) 2nd NP (animate Obj) Verb	2622.46 [578.40] 797.35 [189.24] 835.14 [261.11] 989.97 [264.42]
Scrambled, Animacy difference e.g., (4c) Pasuta-o Jon-ga tabeta. 'John ate pasta.'	96.11 [2.07]	Sentence 1st NP (inanimate Obj) 2nd NP (animate Subj) Verb	2569.76 [717.58] 764.57 [204.87] 877.40 [296.94] 927.82 [284.86]
Scrambled, No animacy difference e.g., (4d) Mearii-o Jon-ga hometa. 'John praised Mary.'	64.44 [12.88]	Sentence 1st NP (animate Obj) 2nd NP (animate Subj) Verb	2895.29 [697.85] 819.19 [261.62] 922.72 [271.06] 1153.38 [315.95]

For accuracy, sentential reading times and reading times per word, the outcome from the T-test analyses is shown in the below table. Although no significant difference was found in reading times for the first NP, all other comparisons showed significant differences: unscrambled sentences (4a, 4b) were more accurately comprehended and required less time to read than scrambled sentences (4c, 4d); and sentences with the animacy difference (4a, 4c) were more accurately comprehended and required less time to read than sentences without animacy difference (4b, 4d)).

TABLE 2
T-TEST ANALYSES FOR NATIVE JAPANESE SPEAKERS' ACCURACY SCORE AND READING TIMES IN EXPERIMENT ONE

	Unscrambled SOV (4a) S[+animate] O[-animate] (4b) S[+animate] O[+animate] vs. Scrambled OSV (4c) O[-animate] S[+animate] (4d) O[+animate] S[+animate]	Animacy difference (4a) S[+animate] O[-animate] (4c) O[-animate] S[+animate] vs. No Animacy difference (4b) S[+animate] O[+animate] (4d) O[+animate] S[+animate]
Accuracy	$p < .001*$	$p = .002*$
Sentential Reading time 1st NP Reading time 2nd NP Reading time Verb Reading time	$p < .001*$ $p = .229$ $p = .004*$ $p < .001*$	$p < .001*$ $p = .327$ $p = .045*$ $p < .001*$

Note. An asterisk indicates significant differences ($p < .05$).

These results show that both word order and NP-animacy significantly affect the task-performance of native Japanese-speaking participants.

B. Native English Speakers

The mean values and standard deviations of reading times and comprehension accuracy for native English speakers are summarized in the table below.

TABLE 3
NATIVE ENGLISH SPEAKERS' ACCURACY SCORE AND READING TIMES IN EXPERIMENT ONE

Conditions and Example sentences	Accuracy (%) [SD]	Reading time (msec) [SD]	
Unscrambled, Animacy difference e.g., (4a) Jon-ga pasuta-o tabeta. 'John ate pasta.'	95.75 [2.02]	Sentence 1st NP (animate Subj) 2nd NP (inanimate Obj) Verb	4395.35 [1564.87] 1882.74 [827.89] 1452.67 [570.01] 1059.93 [410.54]
Unscrambled, No animacy difference e.g., (4b) Jon-ga Mearii-o hometa. 'John praised Mary.'	93.33 [4.02]	Sentence 1st NP (animate Subj) 2nd NP (animate Obj) Verb	5500.34 [2020.74] 2079.23 [964.48] 1873.31 [816.87] 1547.79 [684.68]
Scrambled, Animacy difference e.g., (4c) Pasuta-o Jon-ga tabeta. 'John ate pasta.'	92.11 [8.88]	Sentence 1st NP (inanimate Obj) 2nd NP (animate Subj) Verb	5046.42 [2112.48] 2304.52 [1194.91] 1622.04 [707.95] 1119.86 [547.32]
Scrambled, No animacy difference e.g., (4d) Mearii-o Jon-ga hometa. 'John praised Mary.'	58.18 [18.25]	Sentence 1st NP (animate Obj) 2nd NP (animateSubj) Verb	5502.36 [2290.97] 2018.13 [1041.02] 1925.48 [1030.94] 1558.75 [863.39]

The outcome from the T-test analyses is summarized in the table below. Accuracy rate was found to be significantly different for both comparative tasks, just as with native Japanese speakers. However, native English speakers differed from native Japanese speakers with respect to reading times. For native English speakers, word order (i.e., scrambled (4a, b) sentences vs. unscrambled (4c, d) sentences) resulted in no significant difference while animacy did.

TABLE 4
T-TEST ANALYSES FOR NATIVE ENGLISH SPEAKERS' ACCURACY SCORE AND READING TIMES IN EXPERIMENT ONE

	Unscrambled SOV (4a) S[+animate] O[-animate] (4b) S[+animate] O[+animate] vs. Scrambled OSV (4c) O[-animate] S[+animate] (4d) O[+animate] S[+animate]	Animacy-difference (4a) S[+animate] O[-animate] (4c) O[-animate] S[+animate] vs. No Animacy-difference (4b) S[+animate] O[+animate] (4d) O[+animate] S[+animate]
Accuracy	$p = .011^*$	$p = .002^*$
Sentential Reading time	$p = .159$	$p = .006^*$
1st NP Reading time	$p = .229$	$p = .353$
2nd NP Reading time	$p = .251$	$p = .012^*$
Verb Reading time	$p = .396$	$p = .006^*$

Note. An asterisk indicates significant differences ($p < .05$).

The results above demonstrate that, in reading Japanese sentences, native English speakers rely on the semantic information from the animacy of NPs more than the syntactic information from the word order.

VII. DISCUSSION: EXPERIMENT ONE

As shown in Tables 1 and 3, the results indicate that, for both native Japanese and English-speaking participants, the accuracy scores for (4a) with both syntactic and semantic cues, (4b) with the syntactic cue (unscrambled SO word order), and (4c) with the semantic cue (subject-object animacy difference) were considerably higher than (4d) with neither cue. Also, as shown in Tables 2 and 4, comprehension accuracy of the unscrambled sentences (4a, 4b) was significantly higher than for the scrambled sentences (4c, 4d), and comprehension accuracy of the sentences with subject-object animacy difference (4a, 4c) was significantly higher than comprehension for the sentences with no animacy difference (4b, 4d). These results indicate that both cues from unscrambled SOV word order and from the subject-object animacy difference significantly improved accurate comprehension of Japanese sentences.

The native Japanese speakers' reading times for the unscrambled sentences (4a, 4b) were shorter than for the scrambled sentences (4c, 4d). Also, reading speed was significantly faster for the sentences with subject-object animacy difference (4a, 4c) compared to the sentences with no animacy difference (4b, 4d). This outcome suggests that the native Japanese speakers' processing speeds were affected by both word order and animacy difference.

The native English speakers' reading times for the sentences with subject-object animacy difference (4a, 4c) was significantly shorter than for sentences with no animacy difference (4b, 4d), while the reading times for the unscrambled sentences (4a, 4b) were not significantly different from those of the scrambled sentences (4c, 4d). This suggests that the animacy of NPs (a semantic factor) is reliable for English speakers when attempting to quickly comprehend Japanese sentences, but the word order (a syntactic factor) is not.

The observation of the reading times per word reveals the effect of NP-animacy in more detail. Regarding the syntactic factor (word order), native Japanese speakers read the second NP and verb in unscrambled sentences (4a, 4b) significantly faster than those in scrambled sentences (4c, 4d). In other words, the delay of the participants' sentence processing occurred on the second NP and the verb. This suggests that native Japanese speakers retrieved the first NP (object) to put it after the second NP (subject) in order to process them in the default SO order, when encountering scrambled sentences, as illustrated below.

(7) ~~Object NP_t~~ → Subject NP → Object NP_t

         |_____|
          (Retrieve)

Also, the reading slow-down appearing on the verb could be considered a spill-over effect. Even when the Japanese speakers processed the verb, they were possibly still trying to construct the default (unscrambled) SOV sentences.

Regarding the semantic factor (animacy), the time required for native Japanese speakers to read the second NP and verb was significantly longer in sentences with no subject-object animacy difference (4b, 4d) compared to the sentences with animacy difference (4a, 4c). The delay of the participants' reading appeared on the second NP because, when they encountered the second NP (when both NPs were animate), they were likely to be confused as to which NP was the subject or object. This slow-down also appeared upon processing the verb, which may be another example of a spill-over effect; their confusion may have continued onto the end of the sentences.

On the other hand, similar to native Japanese speakers, the time required for English speakers to read the second NP and verbs was significantly longer in sentences with no subject-object animacy difference (4b, 4d) compared to those with animacy difference (4a, 4c). However, no significant differences were found between the times required for

unscrambled sentences (4a, 4b) and scrambled sentences (4c, 4d). This clearly suggests that processing speeds were significantly affected only by NP-animacy, but not word order.

Overall, the results indicate that native Japanese speakers rely on both the syntactic cue from the word order and the semantic cue from the NP-animacy, but native English-speaking learners of L2 Japanese primarily rely on semantic cues from the NP- animacy.

VIII. EXPERIMENT TWO

As mentioned, in Japanese, the unscrambled SOV order is default, and the scrambled OSV order is non-default. The first experiment above revealed that native Japanese speakers read the sentences in the scrambled word order significantly slower with less accuracy, compared to the unscrambled sentences. A fundamental question arising here is, when and why do Japanese speakers scramble the subject and object? One possible answer regarding production/utterance is the different accessibility-levels of each word. In a real-time conversation, speakers may tend to produce a word, which they first accessed in their mind, and incrementally complete a sentence following the word. This is not only true to Japanese scrambling. In English also, native English speakers occasionally say the object first as, 'That, I don't know', for example.

In addition, another explanation pertaining to discourse-level effect was suggested by the Otsu (1994) and Masunaga's (1983) studies mentioned earlier. According to them, the presence of the referent in preceding context and definiteness of a fronted object motivate scrambling; scrambling occurs in order to topicalize an NP that overlaps with an NP from the preceding context. Thus, Masunaga argues, if the fronted object-NP is a definite NP that refers to an entity, the scrambled sentences sound more acceptable. Also, in Otsu's study, providing the preceding context with a referent of the fronted object-NP facilitated native Japanese children's comprehension of scrambled sentences. Along with this line, the second experiment of the current study tested the effects of definiteness and preceding contexts with native Japanese speakers and native English-speaking L2 Japanese learners. In other words, this second experiment examined the discourse-level effect of the definiteness of the fronted object-NP and the preceding context on the processing of scrambled sentences.

A. Participants

Twelve native Japanese speakers and eleven native English speakers from the University of South Carolina participated in Experiment 2. Like Experiment 1, the native English speakers were L2 Japanese learners, enrolled in Japanese language classes at the University.

B. Materials

In this experiment, the independent variables were the definiteness of the fronted object-NP (definite or indefinite) and whether the fronted object-NP was preceded by a referent, which serves as a contextual cue. Since Japanese does not have indefinite or definite articles (i.e., 'a/an' or 'the'), the definiteness of the NP was established using *sono* ('that') in this experiment, consistent with Masunaga's (1983) study. The experimental sentences were given to the participants in three conditions shown below.

(8)   a. Indefinite fronted Object

      e.g.   Ahiru-o   kame-ga   oshita.
                duck-ACC   turtle-NOM   pushed
                'A turtle pushed a duck.'

  b. Definite fronted Object

      e.g.   Sono-ahiru-o   kame-ga   oshita.
                that-duck-ACC   turtle-NOM   pushed
                'A turtle pushed the duck.'

  c. Preceding context + Definite fronted Object

      e.g.   Ahiru-ga   ita.   Sono-ahiru-o   kame-ga   oshita.
                duck-NOM   existed   that-duck-ACC   turtle-NOM   pushed.
                'There was a duck. A turtle pushed the duck.'

Just as in the first experiment, the sentences were presented in Japanese texts with English translations for the content words, as shown below.

(9)   そのアヒル(that duck)を　かめ(turtle)が　おした(pushed)。

In order to exclude the semantic influence, all the NPs were animate. Also, the preceding context as in (8c) did not provide a pragmatic clue for finding which NP in the following scrambled sentences was the subject or object. All sentences were in the past tense, provided with comprehension questions as shown below.

(10)   Q: Which is the correct translation of the previous sentence? Press '1' or '2'.

                1. A turtle pushed that duck.
                2. That duck pushed a turtle.

There were 45 experimental sentences (15 for each of (8a), (8b) and (8c)), and they were mixed among 70 distractor sentences. The experimental and distractor sentences were given in random order. The procedure of this experiment was the same as the first experiment: self-paced, word-by-word reading in the moving window paradigm.

C. Data Analyses

The measured dependent variables were (i) the accuracy of the comprehension, which was assessed by the score of the comprehension question, and (ii) the reading time of all the scrambled OSV sentences, excluding the preceding context. The T-test was used to compare the three conditions with respect to these variables.

According to Masunaga (1983), participants were expected to perform better in comprehension accuracy and reading times for sentences (8b, 8c) with definite object-NPs than for those (8a) with indefinite object-NPs. Also, according to Otsu (1994), the participants were expected to perform better for sentences (8c) with preceding context than sentences (8a, 8b) with no preceding context.

IX. RESULTS: EXPERIMENT TWO

A. Native Japanese Speakers

The mean values and standard deviations of reading times and accuracy rates in the results from the native Japanese speakers are summarized in the table below.

TABLE 5
NATIVE JAPANESE SPEAKERS' ACCURACY SCORE AND READING TIMES IN EXPERIMENT TWO

Conditions and Example sentences	Accuracy (%) [SD]	Reading time (msec) [SD]	
Indefinite fronted Object e.g., (8a) Ahiru-o kame-ga oshita. 'A turtle pushed a duck.'	87.23 [14.22]	Sentence 1st NP (animate Subj) 2nd NP (inanimate Obj) Verb	2376.79 [997.95] 668.42 [254.90] 695.77 [208.49] 1012.60 [599.44]
Definite fronted Object e.g., (8b) Sono-ahiru-o kame-ga oshita. 'That turtle pushed the duck.'	90.00 [9.56]	Sentence 1st NP (animate Subj) 2nd NP (animate Obj) Verb	2624.75 [911.88] 937.13 [394.73] 765.63 [241.09] 921.98 [389.49]
Preceding context + Definite fronted Object e.g., Ahiru-ga ita. Sono-ahiru-o kame-ga oshita. 'There was a duck. A turtle pushed the duck.'	93.89 [5.42]	Sentence 1st NP (inanimate Obj) 2nd NP (animate Subj) Verb	2391.23 [572.67] 782.56 [181.43] 807.07 [228.06] 801.60 [279.70]

The accuracy rates and reading times for the three conditions were compared via T-test, whose outcome is shown below.

TABLE 6
T-TEST ANALYSES FOR NATIVE JAPANESE SPEAKERS' ACCURACY SCORE AND READING TIMES IN EXPERIMENT TWO

	(8a) Indefinite fronted Object vs. (8b) Definite fronted Object	(8a) Indefinite fronted Object vs. (8c) Preceding context + Definite fronted Object	(8b) Definite fronted Object vs. (8c) Preceding context + Definite fronted Object
Accuracy	$p = .254$	$p = .067$	$p = .066$
Sentential Reading time 1st NP Reading time 2nd NP Reading time Verb Reading time	$p = .081$ $p = .003*$ $p = .007*$ $p = .219$	$p = .465$ $p = .025*$ $p = .038*$ $p = .038*$	$p = .088$ $p = .081$ $p = .249$ $p = .015*$

Note. An asterisk indicates significant differences ($p < .05$).

Regarding the accuracy rates and sentential reading times, the analyses showed no significant difference between the three conditions. However, there were significant differences in reading times per word. First, for the first NP (scrambled/fronted object) and the second NP (subject), the reading times for the (8a) indefinite-OSV sentences were significantly shorter than for the other two conditions. In contrast, the reading time for the verb in the (8c) definite-OSV with preceding context was significantly shorter than the other two conditions. In other words, the native Japanese speakers' reading was initially faster for (8a) sentences with indefinite fronted objects than for the others, but the reading became faster for (8c) sentences with preceding contexts at the end, compared with the other sentences.

B. Native English Speakers

The mean values and standard deviations of reading times and accuracy of native English-speaking participants are summarized in the table below.

TABLE 7
NATIVE ENGLISH SPEAKERS' ACCURACY SCORE AND READING TIMES IN EXPERIMENT TWO

Conditions and Example sentences	Accuracy (%) [SD]	Reading time (msec) [SD]	
Indefinite fronted Object e.g., (8a) Ahiru-o kame-ga oshita. 'A turtle pushed a duck.'	55.76 [29.26]	Sentence 1st NP (animate Subj) 2nd NP (inanimate Obj) Verb	4135.37 [2137.26] 1458.82 [862.47] 1265.43 [792.91] 1411.12 [630.03]
Definite fronted Object e.g., (8b) Sono-ahiru-o kame-ga oshita. 'That turtle pushed the duck.'	57.31 [28.32]	Sentence 1st NP (animate Subj) 2nd NP (animate Obj) Verb	4608.32 [2301.99] 1862.08 [928.79] 1258.84 [618.50] 1487.41 [946.77]
Preceding context + Definite fronted Object e.g., Ahiru-ga ita. Sono-ahiru-o kame-ga oshita. 'There was a duck. A turtle pushed the duck.'	70.91 [22.83]	Sentence 1st NP (inanimate Obj) 2nd NP (animate Subj) Verb	3755.45 [1671.16] 1458.95 [741.59] 1173.10 [607.19] 1123.40 [369.81]

Accuracy, sentential reading times and reading times per word were compared for the three conditions. The outcome from T-test analyses is shown below.

TABLE 8
T-TEST ANALYSES FOR NATIVE ENGLISH SPEAKERS' ACCURACY SCORE AND READING TIMES IN EXPERIMENT TWO

	(8a) Indefinite fronted Object vs. (8b) Definite fronted Object	(8a) Indefinite fronted Object vs. (8c) Preceding context + Definite fronted Object	(8b) Definite fronted Object vs. (8c) Preceding context + Definite fronted Object
Accuracy	$p = .419$	$p = .014*$	$p = .013*$
Sentential Reading time	$p = .005*$	$p = .048*$	$p = .004*$
1st NP Reading time	$p = .001*$	$p = .500$	$p = .011*$
2nd NP Reading time	$p = .214$	$p = .322$	$p = .190$
Verb Reading time	$p = .326$	$p = .007*$	$p = .044*$

Note. An asterisk indicates significant differences ($p < .05$).

The analyses showed that the accuracy scores for (8c) definite-OSV preceded by context were significantly higher than the two conditions with no preceding context (8a, 8b). No significant differences were otherwise observed between them.

As for the sentential reading times, significant differences were found between all conditions; reading for (8c) definite-OSV preceded by context were significantly faster than the other conditions; and reading for the (8a) indefinite object-NP condition was found to be faster than (8b) definite object-NP with no preceding context.

Regarding the reading time per word, as for the first NP (i.e., fronted object-NP), the reading time was found to be longer for (8b) definite object-NP with no preceding context compared to the other two conditions (8a, 8c). No significant differences were found between these two conditions. Also, no significant differences were found in the reading times for the second NP (i.e., subject-NP). As for the reading time per verb, reading times for (8c) definite-OSV preceded by context was significantly shorter than for the other two conditions (8a, 8b).

X. DISCUSSION: EXPERIMENT TWO

Regarding native Japanese speakers, no significant differences were found between the three conditions of (8a), (8b) and (8c) with respect to the accuracy scores and sentential reading times. Closer inspection of per-word reading times reveals that when processing the first NP and the second NP, reading speeds were faster for the (8a) sentences with indefinite object-NP compared to the other conditions with definite object-NP (8b, 8c). This indicates two possible explanations: first, simply because the indefinite object-NP in (8a) (i.e., *ahiru-o* or 'duck-ACC') were shorter than the definite object-NPs in (8b, 8c) (i.e., *sono-ahiru-o* or 'that duck-ACC'), the indefinite NP allowed participants to read them faster than definite NPs, although all words were short enough to fit in readers' perceptual span. Second, another possible explanation is that the definiteness of the object-NP in (8b, c) led participants try to search for and retrieve its referent, which required extra time, thereby increasing reading times.

However, native Japanese speakers' reading time per verb was fastest for (8c) definite-OSV preceded by context compared to the other two conditions (8a, 8b). This may reflect the facilitatory effect from the preceding context, as argued in Otsu's (1994) study. In other words, participants seem to have less confusion in processing scrambled sentences, when the referent of the fronted object-NP appeared earlier in the preceding context. Furthermore, the presence of the preceding context may be motivation for scrambling, and the markedness of the scrambled word order could be neutralized, thereby allowing participants to process the scrambled OSV sentences relatively quickly.

On the other hand, (8b) sentences with definite object-NP but with no preceding context were not found to be read any faster than (8a) those with indefinite object-NP. This may indicate that only definiteness alone does not help native Japanese speakers' processing of the scrambled sentences: a clear referent for the fronted object-NP was needed to be quickly processed. This explanation could be still compatible with Masunaga's (1983) argument that Japanese

scrambling is an option for topicalization of an NP (i.e., whereby a fronted object-NP is made to be the topic of the sentence). Essentially, the topic-NP in Japanese carries the information that the participants of the communication share and already know (Kuno, 1972). Thus, in order to topicalize an NP, the NP should be information that has appeared previously or is otherwise already known. The condition (8b) without preceding context or referent to the fronted object-NP was not sufficient to establish the topic-hood of the fronted object-NP in scrambled sentences.

The discussion above about native Japanese speakers' processing is summarized as follows: preceding context that includes the fronted object's referent facilitates faster processing by native Japanese speakers, but definiteness of the fronted object-NP alone and without referent does not.

As for the results from the native English speakers, first, when observing their accuracy scores, (8c) sentences with previous context were comprehended significantly more accurately than the other conditions. However, when the fronted object-NP was definite but with no preceding context as in (8b), comprehension was not improved compared to when the fronted-NP was indefinite as in (8a). Second, in observing the native English-speaking participants' reading time for the verb, it was faster when preceding context was provided as in (8c), compared to the other conditions. These outcomes should be, similarly to native Japanese speakers, indications of the facilitatory effect from the preceding context; the presence of the referent for the fronted object-NP successfully helped participants quickly process scrambled sentences.

However, the native English-speaking participants' reading times exhibit a more radical effect compared to that of native Japanese speakers. Their sentential reading times and the reading times per the first NP show that (8b) sentences with definite object-NP but with no preceding context were read significantly slower than the other two conditions. Definiteness without preceding context seemed to have penalized participants' processing. Marking of definiteness for an NP logically requires the presence of its referent. Because a definite NP is not preceded by its referent, the English-speaking readers may have kept searching for it, which appeared as the longest reading time for the first NP (i.e., definite object-NP) in the condition (8b).

In summary, the definiteness of the fronted object-NP with the presence of its referent facilitated the processing of scrambled sentences both for native Japanese and English speakers. Furthermore, definiteness alone without referent penalized native English speakers' processing.

XI. CONCLUSIONS AND LIMITATIONS

From the results of the first experiment, we found that native Japanese speakers equally rely on both the syntactic cues from word order and semantic cues from NP animacy, whereas animacy difference contributes more than word order for native English-speaking L2 Japanese learners. This finding is plausible considering that information regarding whether an entity is animate or inanimate completely overlaps in English and Japanese as a cue for sentence comprehension. The information from word order only partially overlaps in English and Japanese because the default SO word order is generally always present in English, but not Japanese. Thus, this supports Clahsen and Felsher's (2006) claim that, while adult L2 learners access lexical and semantic cues in the same ways as native speakers, syntactic information is less accessible to them.

From the results of the second experiment, it was shown that the preceding context significantly facilitated both the native Japanese and English speakers' comprehension of the scrambled OSV sentences. With no cue from animacy difference nor default word order available, the participants accurately processed the scrambled sentences when a preceding context and the referent of the scrambled object-NP was provided. The second experiment also revealed the significantly slower reading speed of the sentences with definite fronted object-NP without preceding context for native English speakers. They took a comparably longer time when reading the fronted definite object-NP without preceding context, which indicates the penalty from the absence of the referent of the definite NP.

Another finding from the current study is that both native Japanese and English speakers' reliance on case markers is relatively small. Their comprehension accuracy for scrambled sentences was low when no distinction was made between subjects and objects with respect to animacy, despite all being marked by correct case markers. The results imply that the effect from syntactic cue (word order) and semantic cue (animacy) may be stronger than morphological cues (case markers): a possible research topic in further studies.

While the two experiments in this study exhibited plausible findings, there are some limitations in this study. One possible limitation is that the words used in the experiment were presented both in Japanese texts and English translation for each content word as shown in (5) and (9), which may bias analysis of reading times. Another possible limitation of the experiments is the small number of participants. Outcomes may potentially differ given more participants.

In addition, the results for the native English speakers could vary depending on the participants' L2 Japanese proficiency level. Participants in the current study were enrolled in the first or second semester of Japanese classes, which is why we had to provide English translations for content words. Further research is required to determine whether highly proficient L2 Japanese speakers may exhibit performance more similar to that of native Japanese speakers.

In conclusion, this study investigated the effects of the word order and animacy with respect to accuracy and processing time of Japanese scrambled sentences for native Japanese speakers and native English speakers. The

findings from this study should be tested again after addressing the limitations. Additional research might furthermore clarify the validity of the findings of this study and contribute to a more comprehensive understanding of how Japanese sentences are processed.

REFERENCES

[1] Bates, E. & MacWhinney, B. (1989). Functionalism and the competition model. In B. MacWhinney & E. Bates (Eds.), *The crosslinguistic study of sentence processing* (pp. 3-76). Cambridge: Cambridge University Press.

[2] Caluianu, D. (2005). *Emotion scripts and the grammar of emotions in Japanese.* Paper presented at the 11th International Conference of the EAJS, Viena.

[3] Clahsen, H. & Felsher, C. (2006). Grammatical processing in language learners. *Applied psycholinguistics, 27*, 3-42.

[4] Ferreira, F. & Stacy, J. (2000). *The misinterpretation of passive sentences*. Manuscript submitted for publication.

[5] Ferreira, F., Bailey, K. G. D., & Ferraro, V. (2002). Good-enough representations in language comprehension. *Current Directions in Psychological Science, 11*, 11-15.

[6] Gass, S. (1989). How do learners resolve linguistic conflicts? In S. Gass & J. Schachter (Eds.), *Linguistic perspectives on second languages acquisition* (pp. 183-200). Cambridge, NY: Cambridge University Press.

[7] Hakuta, K. (1982). Interaction between particles and word order in the comprehension and production of simple sentences in Japanese children. *Developmental psychology, 18*(1). 62-76.

[8] Hara, M. (2009a). Evidence for L2 syntactic gap=processing in Japanese scrambling sentences. In B. Melissa, T. Ionin, S. Montrul, & A. Tremblay (Eds.) *Proceedings of the 10th generative approaches to second language acquisition conference (GASLA 2009)* (pp. 54-63). Somerville, MA: Cascadilla Proceedings Project.

[9] Hara, M. (2009b). L2 processing of Japanese scrambling under the parallel architecture framework. In J. Crawford, K. Otani & M. Takahashi (Eds.), *Proceedings of the 13rd conference of generative approaches to language acquisition North America (GALANA 2008)* (pp. 125-135). Somerville, MA: Cascadilla Proceedings Project.

[10] Hayashibe, H. (1975). Word order and particles: A developmental study in Japanese. *Descriptive and applied linguistics, 3.* 1-18.

[11] Iwasaki, N. (2003). L2 acquisition of Japanese: Knowledge and use of case particles in SOV and OSV sentences. In S. Karimi (Ed.), *Word order and scrambling* (pp. 273-200). MA: Blackwell.

[12] Keenan, E. (1985). Passive in the world's languages. In Shopen, T. (ed.), *Language typology and syntactic description, vol 1: Clause structure* (pp. 243-281). Cambridge: Cambridge University Press.

[13] Kilborn, K. & Ito, T. (1989). Sentence processing strategies in adult bilinguals. In B. MacWhinney & E. Bates (Eds.), *The crosslinguistic study of sentence processing* (pp. 257-291). Cambridge: Cambridge University Press.

[14] Koda, K. (1993). Transferred L1 strategies and L2 syntactic structure in L2 sentence comprehension. *Modern Language Journal 77*(4), 490-500.

[15] Kuno, S. (1972). Functional sentence perspective. *Linguistic Inquiry 3*, 269-320.

[16] Lakshman, U. & Ozeki, M. (1996). The case of the missing particle: Objective case assignment and scrambling in the early grammar of Japanese. In A. Stringfellow. D. Cahana-Amitay, E. Hughes, & A. Zukowski (Eds.), *Boston University conference on language development (BUCLD) 20 proceedings* (pp. 431-442). Somerville, MA: Cascadilla Press.

[17] Mazuka, R., Itoh, K., & Kondo, T. (2002). Cost of scrambling in Japanese sentence processing. In M. Nakayama (Ed.), *Sentence processing in East Asian languages* (pp. 131-166). Stanford, CA: CSLI.

[18] Masunaga, K. (1983). Bridging. In S. Hattori & K. Inoue (Eds.), *Proceedings of the XIIIth International Congress of Linguistics* (pp. 455-460). Tokyo: Proceedings Publishing Committee.

[19] Omaki, A. & Schulz, B. (2011). Filler-gap dependencies and island constraints in second-language sentence processing. *Studies in second language acquisition, 33.* 563-588.

[20] Otsu, Y. (1994). Early acquisition of scrambling in Japanese. In T. Hoekstra & B. Schwartz (Eds.), *Language acquisition studies in generative grammar* (pp. 253-264). Amsterdam: John Benjamins.

[21] Sano, K. (1977). An experimental study on the acquisition of Japanese simple sentences and cleft sentences. *Descriptive and applied linguistics, 10*, 213-233.

[22] Sorace, A. (2006). Gradience and optimality in mature and developing grammars. In G. Fanselow, C. Fery, M. Schlesewsky, & R. Vogel (Eds.), *Gradience in grammars: Generative perspectives* (pp. 106-123). Oxford: Oxford University Press.

[23] VanPatten, B. (1996). *Input Processing and Grammar Instruction in Second Language Acquisition.* Norwood, NJ: Ablex.

[24] VanPatten, B. (2004). Input processing in SLA. In B. VanPatten (Ed.), *Processing instruction: Theory, research and commentary* (pp. 5-32). Mahwah, NJ: Erlbaum.

[25] White, L. (2011). Second language acquisition at the interfaces. *Lingua, 121*, 577-590.

[26] Yamashita, H. (1997). The effects of word-order and case marking information on the processing of Japanese. *Journal of psycholinguistic research, 26*, 163-188.

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A Classroom-Centered Study of Third Tone in Mandarin Chinese

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Abstract—**Phonological third tone sandhi studies in Mandarin Chinese will lead more often to a lab-centered research, whereas the incorporation of phonetic tone sandhi studies into phonological analyses will shed a light on a classroom-centered study. This incorporation suggests a revised approach to the third tone sandhi from an articulatory perspective. As a result, the study of pitch values and pitch contours of a third tone are taken over by the study of sound positions and jaw/chin movements. The well-known five-level tonal diagram is challenged and replaced by a seven-level tonal diagram with an application of only two forms of pronouncing a third tone ---pseudo third tone and pseudo second tone. All these aim to investigate a classroom-centered study of a third tone as an understudied area to provide practical guidance for Mandarin instructors and learners of Mandarin as second language.**

Index Terms—**phonological/phonetic third tone sandhi studies, classroom-centered study of third tone, seven-level tonal diagram, pseudo third tone and pseudo second tone, incompletely/completely neutralized pseudo second tone**

I. INTRODUCTION

A third tone study of phonological nature has been performed for decades. Considerable progress has been made in our understanding of the processing of third tone sandhi from the phonological perspective. Advances in this literature have allowed many third tone sandhi problems to be addressed and solved. The outcomes which have been achieved through computer-generated data and computer-assisted analysis have provided valuable theoretical descriptions of Mandarin third tone sandhi mechanisms.

However, the successful application of these theoretical analyses to teaching of third tone sandhi for learners of Mandarin as second language has proven to be difficult. Their experimental results from a lab have been met with limited enthusiasm in classrooms, likely due to a combination of the following factors:

1. The main aims of their studies and analyses are primarily lab-centered in order to demonstrate that their outcomes are reliable, accurate and convincing.

2. The authors of these studies might forget that if these experimentally-based outcomes can only be measured and verified by a computer-assisted device such as PRAAT, WinPitch or EMA, these outcomes might paradoxically fail to be easily, accurately and reliably perceived by Mandarin teachers and learners in classroom.

3. Most of the experimental studies for theoretical analysis are based on a five-level numerical scale of pitch values or contours of F_o (fundamental frequency, measured in the units of Hertz). The pitch values, pitch height and pitch contours are deterrent and not easily and accurately perceived by most Mandarin teachers and students without much phonological background.

4. The Mandarin teachers and learners in the classroom feel greatly challenged by the theoretical discourses and linguistic terms used by researchers, linguists and dissertation-writers in phonology, such as autosegmental phonology, optimality theory, constraint-based analyses, surface and underlying patterns, incomplete neutralization, derivational process, tonal domains and metrical domains, bimoraic syllables, etc.

II. CLASSROOM-CENTERED STUDY OF THIRD TONE

A phonological tone sandhi study will lead more often to a lab-centered research, whereas the incorporation of phonetic tone sandhi studies into phonological analyses will shed light on a new approach to a classroom-centered study. This incorporation suggests a revised approach to the third tone sandhi from an articulatory perspective. As a result, the study of pitch values and pitch contours at labs will become a study of sound positions and jaw/chin movements in a classroom. The substantiated empirical findings from sound positions and jaw movements inside the mouth are easier for teachers and learners without much phonological background to comprehend and to apply to their teaching and learning experience. The learning process in the classrooms favors these perceptible properties with strong phonetic bases instead of patterns with abstract phonological features. Although the computer-assisted devices such as PRAAT and WinPitch are great tools to measure the values of Fundamental Frequency (F_o), human ears and mouths remain the final judge of any perceivable third tone sandhi behaviors and processes in teaching and learning experience. The evidence and data generated by computer-assisted devices do not efficiently solve the problem of how to teach the students to pronounce a sandhi third tone or how students know to correct or avoid their mistakes. At the same time, a

seven-level tonal diagram has been developed in order to provide a potentially better model for variable sandhi behaviors than the well-established five-level tonal diagram.

III. FIVE-LEVEL TONAL DIAGRAM

Most of previous Chinese tonal studies are based on or related to the five-level tonal diagram developed by Chao (1930). The five-level tonal diagram can be easily found in many studies of a third tone, even in Tone (linguistics) – Wikipedia:
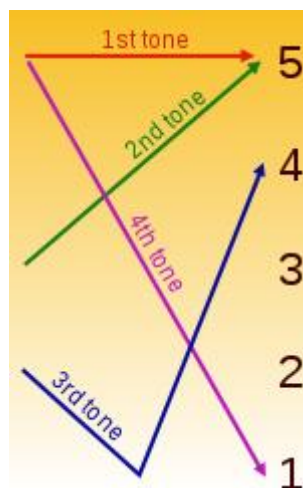
Many researchers have quoted and used this five-point tonal scale in their discourses. The pitch values and pitch contours for four tones are transcribed in numbers. A general consensus has been reached in this literature that the pitch value of 214 on this five point scale is taken for the third tone or the full third tone. As a result, previous studies have consistently shown that the code of 214 represents the full third tone.

Jin (2018) said, "Chao (1930) designed a five-level numerical scale to represent the pitch height, ranging from 1 through 5 with the latter being the highest pitch level. In this representation system, the four basic tones are labeled as "55." "35", "214", and "51" respectively." (P. 68)
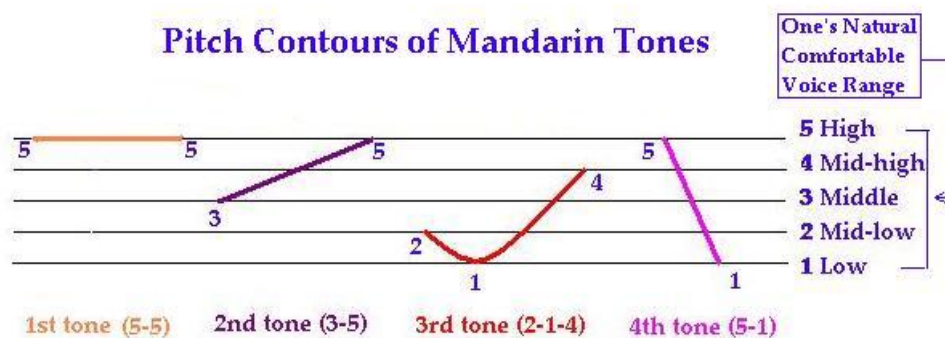
Yin (2003) states, "The numbers from 1 to 5 is used to designate these levels, where 1 represents the lowest comfortable pitch of the vocal range and 5 represents the highest. The first tone (tone 1) (**55**) is high and level. It is pitched near the top of the comfortable voice range. The second tone (tone 2) (**35**) starts around the middle of the voice range 3 and rises straight towards the level of the first tone 5. The third tone (tone 3) (**214**) begins near the bottom of the comfortable voice 2, proceeds to the bottom 1, and then upward to end above the middle 4. The fourth tone (tone 4) (**51**) begins at the top of the comfortable range 5 and falls quickly to the bottom 1 (Ch'en et al., 1994)" (P. 296).

The third tone as 214 in such a diagram is also introduced across the spectrum of textbooks such as in Integrated Chinese (2009). Many linguists and researchers still remain convinced that this five-level tonal diagram is a putative model for the pitch values and contours of the full four tones. If this putative model is challenged, the foundation for many third tone sandhi analyses will be compromised. For me, the number 214 does not represent the basic third tone or the full third tone or citation third tone. The third tone with the number 214 turns out to be only one of variable forms for a sandhi third tone both because the full third tone almost does not occur in our natural utterance and because a sandhi process for the third tone has already taken place even when four Mandarin lexical tones are pronounced one after another as a demonstration of teaching. This five-level scale is static in the sense that it represents only four full

tones and cannot be applied to the dynamic third tone sandhi process. This static five-level scale fails to explain the arbitrary nature of the third tone sandhi in natural utterances from both phonetic and phonological perspectives.

IV. SEVEN-LEVEL TONAL DIAGRAM

If the five-level tonal diagram as a foundation for many third tone sandhi studies is challenged, my seven-level tonal diagram may potentially provide a better model for four tones as well as for variable sandhi behaviors. In this seven-level tonal diagram, F_0 trajectory and pitch values are replaced by a sound's position inside the cavity of the mouth and by a trajectory of jaw/chin movements when a particular sound is pronounced. A dynamic peak of the sound position for the departure point of a third tone, a variable valley of sound positions for its falling and a different peak for its terminal rise within a third tone sandhi contour will be illustrated in the following diagrams instead of simply a static pitch value such as 214.

First Tone	Second Tone	Third Tone	Fourth Tone	
				7
				6
				5
				4
				3
				2
				1
				0
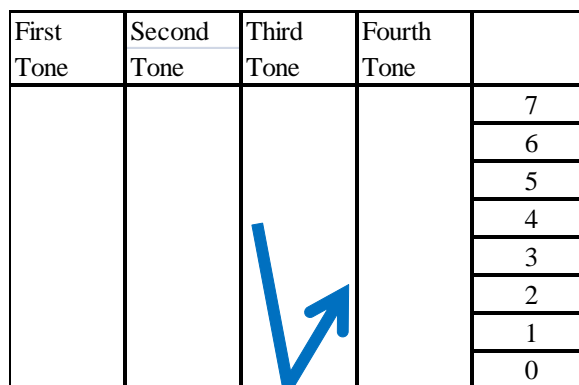
Figure 1 for ǎ as a **Full Third Tone** (**Third Tone** or **Citation Third Tone**)

Figure 1 is a static seven-level scale diagram. It is static in the sense that it represents the height of a sound position and the contour of the jaw/chin movement inside the mouth only for ǎ in its full third tone instead of its dynamic third tone sandhi process. In addition, it is static in the sense that it represents only the vowel "a" instead of any other vowels in a third tone or any sounds with the combination of a vowel with a consonant because different vowels have different sound positions inside the mouth. The number Zero is especially designated to illustrate the citation third tone or full third tone as a demonstration example when being pronounced in total separation from all the other three tones. The citation third tone or full third tone in this special case is assigned the number 402 instead of 214, and the number 402 indicates a deep falling with a moderate rise. However, the full third tone as 402 is not common in our natural utterance. It exists only as a demonstration or simply as a mistake.

The number Zero can only be applied in some very rare scenarios, when we want to show our great feelings or emotions by pronouncing the word 好 Hǎo 'good' as low as the number Zero in a long drawn-out sound H—ǎ—o in the same way as shouting the English word Yes: Y—e—s!. The number Zero is used in another rare scenario: 我的 Wǒ de 'my/mine.' The word 的 de is pronounced in a neutral tone which is relatively non-salient/non-significant in meaning. As a result, its duration is shortened. For the sake of compensation for the shortened duration of the neutral tone of 的 de，我 Wǒ will get lengthened in duration instead. Therefore, 我 Wǒ in the phrase 我的 Wǒ de in a slow speech tempo can reach as low as the number Zero partially due to its extra long duration of the vowel "uo" and partially due to its derived duration from 的 de in neutral tone. The number for the trajectory of its jaw/chin movement will be 401. Although 好 hǎo in 好的 Hǎo de is followed also by 的 de, the vowel "ao" in 好 hǎo has a shorter duration than the vowel "uo" in 我 Wǒ. Therefore, the number for the trajectory of its jaw/chin movement will be 412 for 好 hǎo in a slow speech tempo instead of 401.

Anyhow, the number Zero is used for these three rare exceptions: full third tone, 好 hǎo pronounced with great feelings and 我 Wǒ in the phrase 我的 with slow speech tempo.

First Tone	Second Tone	Third Tone	Fourth Tone	
				7
				6
				5
				4
				3
				2
				1
				0

Figure 2 for **ā, á, ǎ, à in a Slow or Regular Tempo Instead of a Quick Speech Tempo**

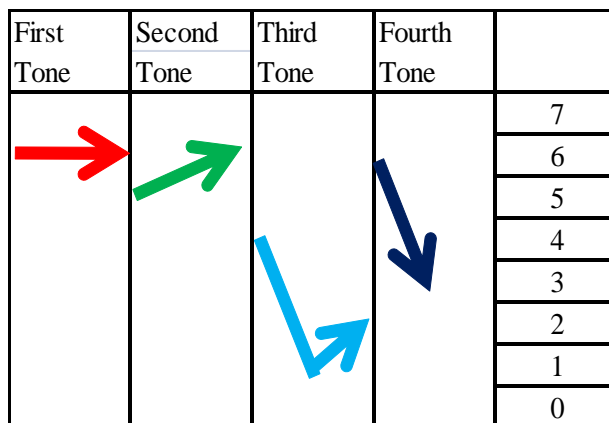In a slow or regular speech tempo, First Tone for "a" in this seven-level scale diagram is characterized by a high–level sound with the number 66; Second Tone is a rising tone with the number 56; Third Tone is a low–dipping and small rise tone with the number 412 instead of 214 (Note: if the third tone is pronounced in a quick speech tempo, its number will be 546), and Fourth Tone is a falling tone that begins at the top of the number 6 and falls only a half way to the bottom with the number 3. Here, "7" represents the highest possible sound position for any vowels or sounds, whereas "1" represents the lowest possible sound position for any vowels or sounds in a natural utterance.

In the five-level tonal system, the pitch values are divided into five levels: upper, upper middle, middle, lower middle, and lower, whereas in the seven-level tonal system, the sound positions are divided into seven levels: upper high, lower high, upper middle, middle, lower middle, upper low, and low. The seven-level scale does not aim to be completely accurate, but aims to be closer to accuracy and closer to fractions. (It would be better if fractions had been introduced in the seven-level scale diagram to describe a smaller terminal rise or a smaller initial fall in a sandhi third tone.)

Figure 2 is a partially static and partially dynamic seven-level scale diagram. It is static in the sense that it represents the sound positions and the contours of the jaw/chin movement inside the mouth only for the four tones ā, á, ǎ, à in a slow or regular utterance tempo instead of other vowels or in a quick tempo. In addition, it is static in the sense that it represents only the four tones with the same vowel "a" instead of any sounds with the different combination of a vowel with a consonant. However, as compared with ǎ with the number 402 in Figure 1, Figure 2 is dynamic in the sense that ǎ with the number 412 has already undergone a third tone sandhi process by shortening its falling distance to 1 instead of to 0, and by shortening the distance of its jaw/chin movement from a moderate rise to a small rise due to its interaction with the other three tones before the involvement of any other adjacent factors.

First Tone	Second Tone	Third Tone	Fourth Tone	
				7
				6
				5
				4
				3
				2
				1
				0
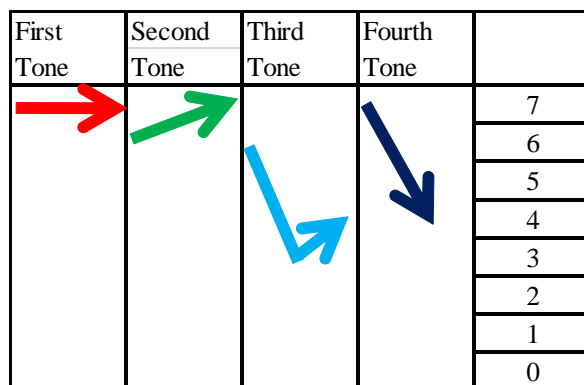
Figure. 3 for **qī, qí, qǐ, qì in a Slow or Regular Tempo**

First Tone in qī is characterized by a top–level sound with the number 77; Second Tone in q íis a rising tone with the number 67; Third Tone in qǐ is marked by low–falling contour and followed by a small rise with the number 634 instead of 214, and Fourth Tone in q ìis a falling tone that begins at the top of the number 7 and falls only a half way through with the number 4 instead of falling to the bottom with the number 1.

Figure 3 is also a partially static and partially dynamic seven-level scale diagram. It is static in the sense that it represents the sound positions and the contours of the jaw/chin movement inside the mouth only for qi with these four tones qī, qí, qǐ, qì in a slow or regular utterance tempo and cannot be applied to any other vowels or any sounds with a different combination of a vowel with a consonant.

However, it is dynamic in the sense that Figure 3 has taken some variables into consideration because the height of the sound position of "qi" shown in Figure 3 is different from the height of the sound position of "a" shown in Figure 2. These changes in sound height and contour of the jaw/chin movement are dynamic in the sense that a phonetic analysis

has been incorporated into a third tone sandhi analysis in this literature, and these differences and changes are clearly perceivable to a learner of Mandarin as a second language even without any phonological background. In addition, Figure 3 is dynamic in the sense that third tone in qǐ is marked by a higher departure point (6 instead of 4 as in mǎ), then by its falling (3 instead of 1 in mǎ) and followed by a small rise with its contour number 634, whereas third tone in mǎ is a low–dipping and small rise tone with a different number 412.

Third Tone for Tǎ	Third Tone for Mǎ	
		7
		6
		5
		4
		3
		2
		1
		0
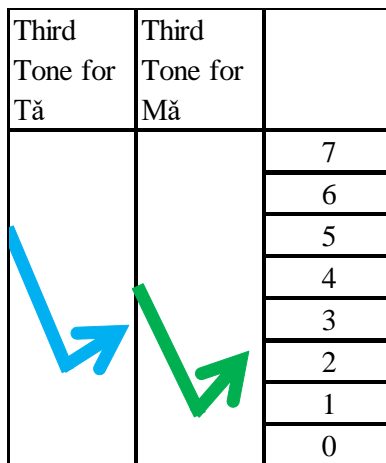
Figure. 4 for **Tǎ and Mǎ in a Slow or Regular Tempo**

Figure 4 is another partially static and partially dynastic seven-level scale diagram. It is static in the sense that it represents the sound positions and the contours of the jaw/chin movement inside the mouth only for these two sounds in a slow or regular speech tempo without a comprehensive consideration of all dynamic third tone sandhi processes. However, it is dynamic in the sense that Figure 4 has taken consonants into consideration such as "t" (called "initial" in Pinyin) in Tǎ and the consonant "m" in Mǎ even though they share the same vowel "ǎ." The number assigned to Tǎ is 523, whereas the number assigned to Mǎ is 412, because the sound position of the consonant "t" is higher than that of the consonant "m."

The seven-level tonal diagram outlines potential directions to which the studies of Chinese third tone can fruitfully proceed. Basing on this seven-level tonal scale, we are also equipped to bring new observations to the sound positions, jaw/chin movement and third tone sandhi behaviors.

V. FULL THIRD TONE AND THIRD TONE SANDHI

As it has been observed, the duration of tone 3 is longer than the other 3 tones in Mandarin. The number one factor which triggers a third tone sandhi is its extra long duration instead of some other factors. Then, the third tone sandhi is conditioned by a number of other factors such as syntactic structure, semantic structure, speech prosody, speaking rates, constituent strength/syntactic hierarchy, etc. Besides, the third tone sandhi is conditioned by its adjacent tones. The substantial duration of a full third tone cannot be maintained when a third tone is pronounced just with the other three tones such as in ā, á, ǎ, à even before the involvement of a syntactic, prosodic, lexical and semantic structure. It has to undertake a third tone sandhi process by compromising its duration, irrespective of any other factors.

So far, there exist only two kinds of full third tones: 1. a full falling and full rising third tone as pronounced like the shape of third tone graph "**V**"; 2. a full falling and half/moderate rising third tone with its number 402 as pronounced for a demo of ǎ with its total separation from any adjacent tones or syllables.

The third tone graph "V" represents the movement of a pendulum, starting with its left swing end and reaching its right swing end. However, the full third tone's contour as a "V" shaped mark has never existed in natural language utterances because the jaw/chin movement starting from high falling will never rise to the same height as that of the pendulum-like third tone graph. It seems that you cannot make your physical jaw/chin perform a full falling and full rising as the shape of a third tone mark due to the principle of effort minimization. The principle of effort minimization will take advantage of its tonal faithfulness by being short of the full rising amplitude of a pendulum swing. Therefore, the first kind of full third tone never exists in our natural utterance. Nevertheless, although the "V" shaped mark for the 3rd tone is misleading, the third tone mark "V" will remain the same in writing in the future because no better tone mark can be found to replace it.

The second kind of full third tone is pronounced only as a demonstration example totally in separation with the other three tones or any sounds. In this case, the third tone is able to perform a deeper falling with a higher/moderate rise. That is why the number Zero in my seven-level scale diagram is designated to represent the full third tone with its number 402.

VI. PSEUDO THIRD TONE AND PSEUDO SECOND TONE

If having only two resulting sandhi forms for the third tone--- 1. Pseudo Third Tone; 2. Pseudo Second Tone---, the third tone sandhi will be much more simplified.

A. Pseudo Third Tone

The third tone is characterized by an initial falling and a terminal rise. The sandhi third tone is also a tone with an initial falling and a terminal rise. But the movement of the jaw/chin in Pseudo Third Tone has a deep initial falling with a small or smaller terminal rise instead of moderate or high terminal rise.

It has been observed in the article Hanyu Pinyin for Mandarin Speakers: Tones – MIT, "You will find that in these four words [好吃, 好人, 好看 and 好吧], "好" is pronounced in the half third tone -- there is no rising. Examples like this abound in speech: "每年" (měinián; every year), "老師" (lǎoshī; teacher), "眼睛" (yǎn.jing; eye) ..."

One of the reasons for the above description might be that a small rising is too small to be measured by the integers of five-level scale diagram due to a lack of fractions. If the contour of the jaw/chin movement is applied to this third tone sandhi process, you will definitely notice a small/smaller terminal rise with the jaw/chin for the third tone "好" in the above examples instead of no rising.

The so-called "half third tone" or "a low falling tone" with only a falling without a rise with its number 31 in the five-level scale is not the contour of a sandhi third tone. Although the terminal rise for this so-called "half third tone" or "a low falling tone" is not as pronounced as that of a full third tone, it is certainly perceivable with a small/smaller rise of the jaw/chin movement.

When a third tone is pronounced at a slow or regular speech rate instead of a fast tempo, it becomes a pseudo third tone with a deep falling and a small/smaller terminal rise or with a shorter falling and a very small terminal rise. (When third tone is pronounced at a fast speech rate, it becomes a pseudo second tone with a small initial fall and a high/long terminal rise instead as in **6.2. Pseudo Second Tone**).

Yin (2003) points out, "In a phonological phrase, the final syllable is lengthened and the non-final syllable(s) is shortened." (P. 297)

Shi (2018) points out, "Cheng (1968) is an earlier phonological study of the Tone 3 sandhi in Mandarin. The author reports that the Mandarin Tone 3 maintains its full tone contour [214] only when it is produced in isolation or on the final syllable of an utterance followed by a pause." (P. 4)

However, the picture presented here by the above authors is far from being complete. For me, whether the initial or final syllable, all the third tones undergo a tone sandhi to different extents because no syllable can be pronounced in its full third tone in natural utterances due to shortening their duration or to the principle of effort minimization. That means that not only will the initial Chinese character with a third tone in a phrase, a sense group or a domain undergo a tonal sandhi process if followed by another Chinese character, but the final syllable of an utterance or the last Chinese character of a phrase or a sense group will also undergo a third tone sandhi process if proceeded by another Chinese character or syllable. That means that the terminal full third tone in an utterance cannot be maintained due to its mutual interaction with the proceeding tone in the same way as the tone sandhi process experienced by a neutral tone in reduplication of syllables or Chinese characters. Although with no adjacent syllables following the final syllable, it will be pronounced with different amounts of articulatory effort when it appears at the end of a phrase or sense group or a domain, just as the original speed of a vehicle will determine its braking distance for its stop. Taking 你好 Nǐ hǎo for example, it is clearly perceivable that 好 hǎo can even sounds shorter than 你 Nǐ in a slow or regular speech tempo with the jaw moving down and up.

B. Pseudo Second Tone

Pseudo Second Tone is different from Pseudo Third Tone because Pseudo Second Tone is similar to a regular second tone. Although Pseudo Second Tone is similar to a regular second tone, the movement of the jaw/chin in pseudo second tone has a small initial fall with a high/long terminal rise. It is pseudo in the sense that Pseudo Second Tone still bears the distinguishing feature of a full third tone with an initial falling and a terminal rise. A third tone becomes a pseudo second tone when the speech tempo increases for an initial third tone in a disyllabic/trisyllabic domain (phrase or sense group) as well as for a non-initial/non-final third tone in a trisyllabic domain (phrase or sense group). In addition, Pseudo Second Tone is divided into two forms: 1. incompletely neutralized pseudo second tone; 2. completely neutralized pseudo second tone.

1. Incompletely Neutralized Pseudo Second Tone

Incompletely neutralized pseudo second tone is pseudo and incompletely neutralized (in a sense similar to but not totally identical to a second tone) in perception. When a third tone is changed from a pseudo third tone in a slow or regular speech tempo to a pseudo second tone (to be more accurate, an incompletely neutralized pseudo second tone) when the speech tempo increases, specially for an initial third tone in a disyllabic/trisyllabic domain (phrase or sense group) in a fast speech tempo. However, its initial small, though very small, falling movement can be clearly perceivable to the speaker. Most of the examples of pseudo second tone belong to an incompletely neutralized pseudo second tone.

2. Completely Neutralized Pseudo Second Tone

Linge (2012) says, "I've read numerous papers arguing that the rising tone resulting from two third tones in a row is identical to a normal second tone. However, I have also read papers which argue that there is a difference." (2012-06-03 at 18:54)

So far, it seems that no resolution has been found to address these two above contradictory arguments identified by Olle Linge. The reason for this lies in two forms of Pseudo Second Tone: 1. incompletely neutralized pseudo second tone; 2. completely neutralized pseudo second tone. Many examples of an incompletely neutralized pseudo second tone support the argument "that there is a difference", whereas the completely neutralized pseudo second tone explains why the researchers argue that "rising tone resulting from two third tones in a row is identical to a normal second tone."

A completely neutralized pseudo second tone is realized in the sense that a sandhi third tone is extremely similar to a second tone. The difference between this sandhi third tone and the second tone is not clearly perceivable to a human being. This completely neutralized pseudo second tone is also realized in the sense that it is still pseudo instead of being 100% identical to the second tone. However, the difference, if any, between this completely neutralized pseudo second tone and the regular second tone can only be identified by a computer-assisted device.

Besides, a pseudo third tone in the initial syllable in a disyllabic or trisyllabic domain (phrase) is very susceptible to the changes of a speech tempo. It will be changed from a pseudo third tone in a slow or regular speech tempo to incompletely neutralized pseudo second tone in a fast speech tempo. The same holds true that an incompletely neutralized pseudo second tone in the initial syllable in a disyllabic or trisyllabic domain (phrase) will be changed back to a pseudo third tone in a slow or regular speech tempo. However, a completely neutralized pseudo second tone in the third tone sandhi process will be insusceptible to the increases or decreases of a speech tempo even when it is in the initial syllable of a disyllabic or trisyllabic domain.

Figure 5 represents a dynamic seven-level scale diagram for a pseudo third tone in a slow or regular speech tempo and an incompletely neutralized pseudo second tone in a fast speech tempo, and Figure 6 represents a completely neutralized pseudo second tone.

Pseudo Third Tone in a slow or regular speech tempo	Incompletely neutralized Pseudo Second Tone in a fast speech tempo	
		7
		6
		5
		4
		3
		2
		1
		0
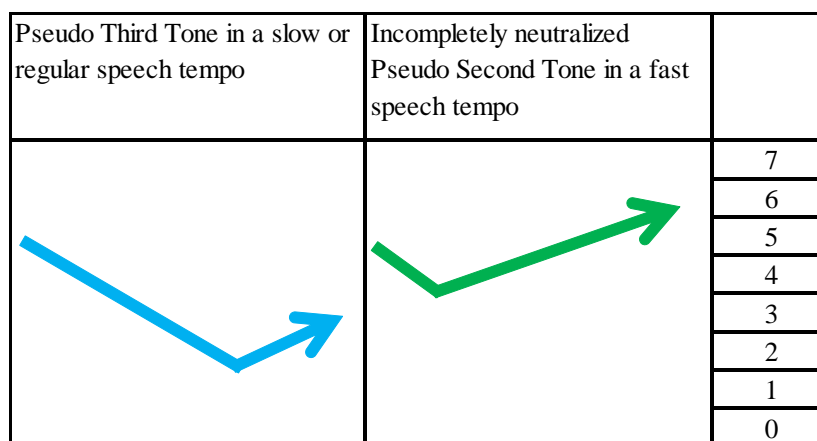
Figure. 5 for 起 Qǐ in 起点 Qǐdiǎn (starting point)

A third tone becomes a pseudo second tone when the speech tempo increases for an initial third tone in a disyllabic domain. 起 Qǐ in 起点 qǐdiǎn 'starting point' in a two third tone string is pronounced as a pseudo third tone with an initial moderate fall and a final small rise in a slow speech rate with the number of 523 due to the relative low sound position of the vowel "iǎn" in the final syllable 点 diǎn. 起 Qǐ in 起点 qǐdiǎn is changed to a pseudo second tone (to be more accurate, an incompletely neutralized pseudo second tone) with an initial small fall and a terminal high rise in a fast speech tempo with the number of 546.

Let's take a well-known pair of 起码 Qǐmǎ 'at least' and 骑马 Qímǎ 'horse riding' for example.

Politzer-Ahles (2019) points out, "Liu (2013) tested six listeners' explicit metalinguistic identification and discrimination of underlying and sandhi-derived Rising tones. In the identification task they heard ambiguous disyllables like [tɕʰi˩˦ ma˩], in which the first syllable was either underlyingly Rising or was changed to Rising via tone sandhi, and had to select the appropriate orthographic representation (for this example, either 起码 /tɕʰi˩ ma˩/ "at least" or 骑马 /tɕʰi˩˦ ma˩/ "ride a horse"). In the discrimination they heard disyllable pairs, where either both disyllables were the same, or one disyllable was a production with an underlying Rising and one a production with a sandhi-derived Rising tone. They then judged whether they were the same or different. The participants were not significantly more accurate than chance level in identifying the tones, but they were significantly above chance in discriminating them. Above-chance discrimination does not indicate that the tones were incompletely neutralized, though, because there are many other ways that different acoustic cues can allow participants to perform well on within-category discrimination (not just in tone perception and not just in incomplete neutralization contexts)."

Why does Liu in the above testing typically take this pair for examples instead of more common pairs? That is because the third tone sandhi of 起码 Qǐmǎ stands out to be an example of being maximally similar to a second tone

and can be classified as a completely neutralized pseudo second tone instead of an incompletely neutralized pseudo second tone. At the same time, they fail to find a solution from the phonetic perspective, namely, to figure out how the sounds of 起码 Qǐmǎ are phonetically produced so maximally similar to a second tone. Let's take the following seven-level scale diagram for illustration.
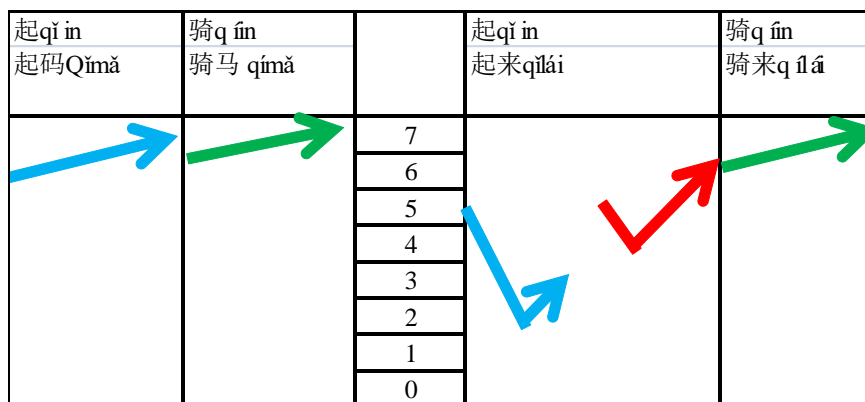
起qǐ in 起码Qǐmǎ	骑q íin 骑马 qímǎ		起qǐ in 起来qǐlái	骑q íin 骑来q ílái
		7		
		6		
		5		
		4		
		3		
		2		
		1		
		0		

Figure. 6 for 起 qǐ in 起码 Qǐmǎ and 骑 q íin 骑马 qímǎ;
for 起 qǐ in 起来 qǐlái (get up) and 骑 q íin 骑来 q ílái (rode over).

起 qǐ in a string of two third tones 起码 qǐmǎ is pronounced as a pseudo second tone (to be more accurate, a completely neutralized pseudo second tone) with the number of 67 in a slow speech rate; it makes no change perceptible to a speaker even when the speech tempo is changed from slow to fast and it will still keep its number of 67 unchanged. It sounds almost exactly like 骑马 qímǎ. Their difference is so small that it can only be identified by a computer-assisted device.

It is important to know that the cases for a completely neutralized pseudo second tone are rare and can be considered as exceptions. They only exist with the four sounds "ji, qi, xi" and a sound with a vowel "ü," and these four sounds must be followed by a syllable with the vowel "a." "ji, qi, xi" and "ü" are located in an extremely high position inside the mouth and almost touch the roof (the hard palate or soft palate) of the mouth. In addition, the final syllable 码 mǎ with the vowel "a" in a disyllabic domain plays an essential role to make the initial small fall in a pseudo second tone almost disappear. The distinguishing feature of "a" in 起码 Qǐmǎ or 骑马 Qímǎ has been captured in the fact that the sound position for "a" will not follow along the contour of the jaw/chin movement when the jaw/chin has a deep falling, whereas "a" will go contrarily to a higher position and stay relatively high there instead. Generally speaking, when a sound position is extremely high and close to the roof of a mouth, the muscle of a mouth should get intense, and this intensity of the muscle will keep the upper jaw and lower jaw closed such as "ji, qi, xi" and "ü." This rule applies to all sounds in Pinyin with the only exception of "a." When "a" is pronounced, the upper jaw and the lower jaw will widely open with intense muscles, and the chin will move downward. However, when the muscle of a mouth stays intense, the sound position for "a" will go upward in a direction contrary to the movement of the chin. This movement of going upward will prevent 起 qǐ from making an initial small fall perceivable before its terminal rising.

If the final syllable mǎ is replaced by 来 lái in Figure 6, we will introduce a new pair of disyllables in 起来 qǐlái and 骑来 q ílái with the initial syllables 起 qǐ and 骑 q í In this new case, the vowel in the final syllable is changed from "a" to "ai." The difference between 起来 qǐlái and 骑来 q ílái is easily identified and clearly perceivable to the speaker. 起 qǐ in this case can make an initial moderate fall with a terminal small rise in a slow speed with the number 523 or an initial small fall with a terminal high rise in a fast speed with the number 546. However, 骑 q íin 骑来 q ílái is a second tone with the number 67.

Another example of a completely neutralized pseudo second tone can be found in 语法 yǔfǎ (grammar). "ü" is located in an extremely high position inside the mouth and almost touch the roof (soft palate) of the mouth. In addition, the final syllable 法 fǎ with the vowel "a" in a disyllabic domain (phrase) plays an essential role to make the initial small fall of the third tone in 语 yǔ almost disappear. It makes no change perceptible to a speaker even when the speech tempo is changed from slow to fast with its number of 67 unchanged.

If we just switch the sequence of the disyllable domain 语法 yǔfǎ 'grammar' to 法语 fǎyǔ 'French', it is important to find that 法 fǎ in 法语 fǎyǔ is capable of an initial deep fall and a final small rise in a slow speech temp as well as of an initial small fall and a final high rise in a fast speech tempo. People might start to wonder why 法 fǎ in 法语 fǎyǔ is capable of an initial deep fall, whereas 语 yǔ in 语法 yǔfǎ is not capable of it without making a typical mistake. The reason for that is because the sound position of 法 fǎ in 法语 fǎyǔ is not extremely high and is relatively lower than 语 yǔ.

Figure 6 is dynamic in the sense that it has taken more variables into consideration because the height of the sound position of "qi" shown in Figure 6 is different from the height of the sound position of "qi" shown in Figure 5. This change in sound heights and contours of the jaw/chin movement even for the same sounds "qi" with the same third tone is dynamic. Besides, Figure 6 is dynamic in the sense that it has taken most variables into consideration not only because the tonal effect of the final syllable on the initial syllable "qi" in a disyllabic third tone sandhi process has been taken into consideration, but also because the effect of the vowel in the final syllable on the initial syllable "qi" in a disyllabic third tone sandhi process has been taken into consideration. These important phonetic changes failed to be incorporated into a phonological third tone sandhi analysis in most previous studies in this literature.

VII. CLASSROOM-CENTERED STUDY WITH VARIABLES OF THIRD TONE SANDHI

A dynamic mapping of a third tone sandhi should include numerous elements of arbitrary and variable nature.

A. Dynamic Seven-Level Tonal Diagram with Variables

Some dynamic features of a third tone sandhi process also have been captured in this diagram when various sound positions inside the mouth have been taken into consideration to indicate the arbitrary nature of a third tone sandhi. The sound position inside the mouth for the same syllable with a third tone should not have one single or same starting height position in a different sandhi environment. At the same time, the sound position inside the mouth for the same syllable with a third tone should not have one single or same lowest position. Furthermore, the sound position inside the mouth for the same syllable with a third tone should not have one single or same final ending height position in a different sandhi environment.

Not only should the whole contour of the jaw/chin movement be illustrated, but different versions of the contour of the jaw/chin movement in different speech speeds should also be mapped out. For example, the gradient differences in number should be delineated in a slow, regular or fast articulatory rate.

Taking Figure 1 for example, the full third tone "ǎ" with its contour value of 402 can be pronounced as 412, 423 or 435 in a different sandhi environment of slow, regular or fast articulatory rate. These productions are still perceived as gradient differences in a third tone sandhi process.

Taking Figure 3 for example, the contour value of 634 for the sandhi third tone "qǐ" indicates that its starting height is higher than the contour value of 412 for "ǎ" in Figure 2. The contour value of 634 for "qǐ" is realized in a slow or regular articulatory rate, and 657 in a fast articulatory rate in Figure 5. Even the asymptotic approximation value of 67 in Figure 6 for "qǐ" is actualized if followed by the vowel "a" in the final syllable in a disyllabic third tone sanhdi.

Taking 语法 yǔfǎ (grammar) again for example, the third tone 语 yǔ takes an extremely high sound position close to the soft palate with the contour value of 67. The dynamic nature of third tone sandhi process in this case is constrained by a threshold of minimum and maximum range. It is important to point out that the number of 67 for 语 yǔ is not as significant as the contour values which run beyond this range for a classroom-centred study. For a teacher to know how a mistake has been made by a Mandarin student or for a Mandarin learner to know how to avoid such a mistake to happen, it is crucial to have a practical understanding of the potential contour values going beyond the range of limits which will lead to an error. The potential mistakes in coarticulation of 语法 yǔfǎ are materialized in the contour values with the number of either 624, 635, 647, 657 or 424. The numbers 624, 635, 647, 657 or 424 all indicate that their falling point is too low.

Students often make mistakes when pronouncing 我 wǒ in 我们 Wǒmen 'we.' The number of 412 for 我 wǒ in a pseudo third tone with a slow or regular tempo and 436 for 我 wǒ in a pseudo second tone with a fast tempo are both within the range of limits. However, the number of 413 with a higher rise in a pseudo third tone is a typical mistake which goes beyond the range of limits for 我 wǒ in 我们 Wǒmen. One of the most frequent/typical mistakes made by Mandarin learners is to change **a small rise to a moderate rise or high rise** in a pseudo third tone, namely **a wrong terminal rise from the number 1 to 3 or 2 to 4 or 3 to 5 in a pseudo third tone with a slow or regular speech tempo** such as in 4**13**, 5**24** or 6**35** instead of 4**12**, 5**23** or 6**34**. Taking 你好 nǐ hǎo for another example, the contour value of 524 for 你 nǐ is only for the full third tone which should be avoided in a third tone sandhi. The contour values of 523 or 534 are realized in a slow or regular articulatory rate or 546 in a fast articulatory rate. When you say 你好 nǐ hǎo with a strong feeling, it should be pronounced as pseudo third tone; if it just serves as a response to somebody's greeting, you will pronounce it as a pseudo second tone. It is crucial for a teacher and for a learner to know which potential contour values might go beyond the range of limits and lead to a mistake. The potential mistakes in coarticulation of 你好 nǐ hǎo are realized with the contour values of 66 in a fast speech rate. The number 66 indicates that the starting point with the number of 6 is too high with intense muscles for the third tone 你 "nǐ" especially in a fast speech tempo, as high as for the first tone. As a result, "nǐ" will actually sound like "nī" with intense muscles instead of relaxed muscles, a typical mistake made by many learners of Mandarin as second language. Taking 很忙 hěn máng for another example, the typical mistake for a Mandarin student is to pronounce 很 hěn with the number of 74 in a fast tempo instead of 546. Because 忙 máng is neither in a fourth tone nor with intense muscles, the muscle of his/her mouth will easily get intense

in a fast speech tempo if the number for the starting point of 很 hěn is too high. All these contribute to make 很 hěn sound like a fourth tone. As a result, 很忙 hěn máng tends to be changed to hèn máng according to the T-POLARITY constraint, which requires an initial tone to be followed by an opposite tone (Duanmu, 1999). That means that second or third tone tends to be changed to first or fourth tone or vice versa, and the relaxed muscles tends to be changed to intense muscles or vice versa. That is why Mandarin students will never have a problem when they pronounce 很 hěn in 很贵 hěn guì 'very expensive.' 很 in 很贵 hěn guì can be correctly pronounced all because 贵 gu ìis a fourth tone with intense muscles which will avoid 很 hěn to get intense with muscle. The solution to this problem is to pronounce 很 hěn in a pseudo third tone in 很忙 hěn máng with the number of 512 or 523 in a third tone sandhi process.

No one fixed number is designated for third tone sandhi in this Seven-Level Tonal Diagram to demonstrate the dynamic behaviours of a sandhi process. However, the threshold or extremity of its dynamic behaviours can be determined. Going beyond these extremities will lead to making a mistake in pronouncing a sandhi third tone.

B. Application of Vowels (and consonants) as a Variable to Third Tone Sandhi Process

The vowels in "ji", "qi", "xi" and "yu" usually take the highest position inside the cavity of the mouth with a relatively shortened duration in Pinyin, and the highest position with the shortened duration of these sounds will usually increase the tensity of the muscles of the mouth. The relatively shortened duration and intensified muscle will not lead to a deep fall or a deep fall with a high rise. Some of diphthongs which have a relatively extended duration with relative relaxation of muscles are pronounced with a widely open mouth such as "ao", "iao" and "uo" which will be capable of a deep fall. However, "a" is the only vowel in Pinyin which is pronounced with a widely open mouth and a relatively extended duration and can still obtain its fairly high sound position with fairly intensified muscles.

C. Speech Tempos and Syntactic Structures as Variables

The syntactic structure as a variable can be found in many previous phonological studies. Taking 我也很好 Wǒ yě hěn hǎo (I am also very good) for example, there are four third tone Chinese characters (syllables) in a row. There are two different ways to pronounce this line due to various speech tempos. In a slow or regular utterance, 我 Wǒ is in a pseudo third tone marked by the jaw/chin contour of a low falling and a small rise with the number 412 or 423. In a fast speech rate, 我 Wǒ is in a pseudo second tone (to be more accurate, an incompletely neutralized pseudo second tone) marked by the jaw/chin contour of a small falling and a high rise with the number 436; 也很 yě hěn are in pseudo second tones marked by the jaw/chin contour of a small falling and a high rise with the number 436 whether in a slow or fast speech rate due to their positions of being non-initial/non-final syllables. 好 hǎo is in a pseudo third tone marked by the jaw/chin contour of a low falling and a small rise with the number of 312 different from the number of 412 for 我 Wǒ when 我 Wǒ is in a slow speech rate. It is clearly perceivable that the duration of the jaw/chin movement for 我 Wǒ is longer than that for 好 hǎo in a slow or regular speech tempo, and the starting sound position for 好 hǎo is lower than 我 Wǒ. 我 Wǒ is capable of both pseudo third tone and pseudo second tone due to its initial position in a row. The utterance of a sentence can be compared to the movement of a car which moves slowly from its static position and speed up quickly, and finally come to a stop. The jaw/chin movement for 好 hǎo cannot maintain its duration of being a full third tone due to its interaction with the short duration and fast tempo of the jaw/chin movement for the preceding syllables 也很 yě hěn. The syntactic structure as a variable can be found in another example. 老 Lǎo in 老 Lǎoshī 'teacher' can be pronounced in a pseudo third tone with its number 412 in a slow/regular speech tempo or in a pseudo second tone with its number 435 in a fast speech tempo. However，老 Lǐ lǎoshī in 李老师 Lǐ lǎoshī (a trisyllabic domain/phrase) can only be pronounced in a pseudo second tone with its number 435 due to its middle position in a trisyllabic domain in this case.

VIII. CONCLUSION

The well-known five-level tonal diagram is replaced by a dynamic seven-level tonal diagram for numerous variables with an application of only **two** ways of pronouncing a third tone --- **pseudo third tone** and **pseudo second tone**. A classroom-centered study of third tone sandhi is easier for teachers and learners to comprehend and to apply to their teaching and learning experience.

REFERENCES

[1]   Chao, Yuen Ren. (1930). A system of tone-letters. Leaves 1-5. Typescript (photocopy). *Le Ma ître Phon étique*, 3rd Series No. 30, 1930 (Note 2), Chinese University of Hong Kong Library

[2]   Ch'en, Ta-tuan et al. (1994). *Chinese Primer*. 2nd Edition. Princeton, New Jersey: Princeton University Press.

[3]   ChineseFor.Us, *Mandarin Three Third Tones in A Row-ChineseFor.Us,* retrieved from https://chinesefor.us/lessons/mandarin-three-third-tones-change-sandhi/, June 2021.

[4]   Duanmu, S. (1999). Metrical structure and tone: evidence from Mandarin and Shanghai. *Journal of East Asian Linguistics*, 8: 1-38.

[5]   *Hanyu Pinyin for Mandarin Speakers: Tones – MIT*, retrieved from https://web.mit.edu/jinzhang/www/pinyin/tones/index.html, June 2021.

[6]   Jin, Wenhua. (2018). *Acquisition of tone sandhis by English speaking learners of Chinese,* retrieved from https://www.ncolctl.org/files/Jncolctl-vol-25/Acquisition%20of%20Tone%20Sandhis%20by%20English%20Speaking%20Learners.pdf, June 2021.

[7]   Linge, Olle. (2012). *Learning the third tone in Mandarin Chinese Hacking Chinese*, retrieved from https://www.hackingchinese.com/learning-the-third-tone-mandarin-chinese/, June 2021.

[8]   Liu, Yuehua et al. (2009). *Integrated Chinese: Textbook Simplified Character*, 3nd Ed., p. 8, Published by Cheng &Trui Company

[9]   *Language differences - Phonetics and phonology,* retrieved from http://esl.fis.edu/grammar/langdiff/phono.htm, June 2021.

[10] Politzer-Ahles, Stephen, et al. (2019). *Mandarin third tone sandhi may be incompletely neutralizing in perception as well as production,* retrieved from https://www.polyu.edu.hk/cbs/sjpolit/pubs/447184_Politzer-Ahles_Manuscript.PDF, p. 4, June 2021

[11] Shi, Yibing. (2018). *In Phonology-syntax interplay with respect to Tone 2 sandhi in Mandarin Chinese,* retrieved from <http://lt.cityu.edu.hk/dec/lt-repo/201718/dec-201718-u-balla-LT4235-yibingshi2-rpt.pdf>, June 2021.

[12] Wikipedia. *Tone (linguistics),* retrieved June 15, 2021 from <https://en.wikipedia.org/wiki/Tone_(linguistics)>

[13] Wikipedia. *Phonetics*, retrieved from https://en.wikipedia.org/wiki/Phonetics, June 2021.

[14] Yin, Hui. (2017). *An optimality theory perspective on Mandarin tone 3 sandhi,* retrieved from <https://www.sryahwapublications.com/annals-of-language-and-literature/pdf/v1-i2/4.pdf>, June 2021.

[15] Yin, Hui. (2003). *"The blocking of tone sandhi in Mandarin Chinese,* retrieved from <http://homes.chass.utoronto.ca/~cla-acl/2003/Yin.pdf>, June 2021.

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Perception of Saudi Students About Non-Native English Teachers and Native English Teachers in Teaching English at Jazan University

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Abstract—This study tries to investigate the perception of Saudi students at Jazan University about native English-speaking teachers (NEST) and non-native English-speaking teachers based on their teaching the language skills and grammar. The perception of 50 native English-speaking teachers and 50 non-native English teachers was collected from the students taught by these teachers. The findings show that native English-speaking teachers are outstanding at teaching reading, listening and speaking. In contrast, non-native English-speaking teachers are very good at teaching grammar, reading and writing skills. This study will help the Saudi government employ and hire teachers from other countries where the native language is English and countries where English is the second language. This study will also support the university authorities, educationists, and syllabus designers assigning teachers to teach different language skills based on native and non-native English-speaking teachers.

Index Terms—perception, native, non-native, language skills, Saudi students

I. INTRODUCTION

English was initially brought to Saudi Arabia in the late 1920s when it was thought to be of little value and faced fierce opposition from society (Alshahrani, 2016). It is believed that English as a foreign language was first taught in the Saudi Arabian school system in 1928, just a few years after the Directorate of Education was established in 1923. (Al-Seghayer, 2011, as cited in Al-Seghayer, 2014)). Saud Arabia is unique in its culture, religion, and perception of English language and English teachers and non-native and native English teachers. It gives readers knowledge of the cultural, linguistic, and historical backdrop of English in Saudi Arabia, emphasizing the main variables that might affect successful English teaching and learning in this nation. The study is unique in that it examines difficulties related to in-country English learning and learners independently from those related to in-country English teaching and instructors (Moskovsky & Picard, 2018). Although Saudi people have a horrible prejudice against the English language and culture because it is the center of all Islamic countries and their thriving economic growth, the government has emphasized English.

The government's Scholarship program, which dates back to the early 2000s, has been crucial in this nation-building effort. The scholarship program, which incorporates paying many Saudi nationals' tertiary education at overseas institutions, is practically a vast investment in human resources - a campaign to upskill a new generation of Saudis and, in the process, create a highly educated, professional, and knowledgeable nation (Alshahrani, 2016). According to (Al-Seghayer, 2014), education is being expanded at all levels, and the country's economy and its industrial and commercial foundation are quickly growing. Suppose an accurate image of the current condition of the English language in Saudi Arabian territory is to be provided. In that case, the flow of foreign personnel and the ever-changing views of the Saudi people toward English and the existence of numerous media sources must all be considered. Indeed, the new language was viewed as posing a severe danger to Saudi Arabia's Arabic mother tongue, culture, customs, and religion: Islam, as a result, due to the language's poor standing in the country (Alrashidi & Phan, 2015). English teaching and learning got little attention for over seven decades. After 9/11, however, there was a significant shift in the way English was taught and learned in the country. Since then, the Saudi Government has made considerable efforts to promote English, resulting in significant advancements in teaching English and its influence. This growth has aided in advancing English's prestige and the language in general. The Saudi Government recognizes the significance of education, as evidenced by the government's annual budget. In 2013, for example, the budget for learning was set at 25% of the overall budget (Ministry of Finance, 2013, as cited in Al-Seghayer, 2014)).

Native language has a tremendous impact on teaching and mastering that language. So, the native and non-native should be defined linguistically. A person's native language is the first language he learns to speak; he is a native speaker of that language (Blomfield as cited in Cook, 1999). Native speakers have (a) a subconscious knowledge of

rules, (b) an intuitive perception of meanings, (c) the ability to converse in social conditions, (d) a variety of linguistic abilities, and (e) language inventiveness, according to (Stern,1983, as cited in Cook,1999).

According to Braine (2010), English instructors' most significant international association is teachers of English to Speakers of Other Languages, Inc. (TESOL). TESOL now has approximately 11,000 members from 149 different countries. In the United States, TESOL is affiliated with 47 autonomous teachers' organizations and 50 comparable organizations in other countries. The influence of TESOL has grown to around 47,000 members globally due to these affiliations (see www.tesol.org). The results show a significant difference between native and non-native English teachers from the students' perspective. The findings show that non-native instructors are better than native English teachers at classroom teaching and administration. However, native teachers are better at in-class communication and have more favorable characteristics. The findings will benefit both native and non-native instructors in identifying and raising awareness of their inadequacies (Ustunluoglu, 2007).

Recent research has begun to untangle the ideological tangle of nativeness, demonstrating that native speaker status is as much a function of race, accent, nationality, or cultural familiarity as language proficiency (Aneja, 2016). So, we found that though Saudi Arabia does not have a long history of learning and teaching the English language, it has not emphasized who are the better teachers, non-native or native English-speaking teachers. It also shows they have cultural biases toward English in the early teaching period. However, now they send their students with a scholarship to study English in English speaking countries. On the other hand, they hire teachers from non-native English-speaking countries like Egypt, India, Sudan, Bangladesh and Pakistan. They also employ some teachers from the USA, UK, Canada, Hungary, and other English-speaking countries. There is hardly any study conducted on language skills like listening, speaking, reading, writing and grammar where non-native or native English teachers are compared from the students' perception.

Though there is a generalization that native English teachers have better in-class communication and reasonable control over language, non-native teachers are better in class control and class teaching. There is no specific study on other aspects of classroom teaching like grammar, understanding students, psychology, and other language skills. This study found skill-based perception, classroom control, teaching strategies and classroom management. Fifty native English Teachers and fifty non-native English-speaking teachers taught over five hundred students, and data were collected from the students about the perception of both types of teachers. A descriptive test was done to analyze the data. Another t-test was conducted to see the difference in perception of both kinds of teachers. In some aspects, non-native teachers are better than native teachers, and native English-speaking teachers outperform other elements. This study will add new knowledge about teaching the English language and the perception of native and non-native teachers in Saudi Arabia. This will also guide Saudi authorities in hiring English teaching personnel, whether from English speaking countries or non-native countries. Moreover, this study will guide the authorities, educationists, and syllabus designers to assign teachers in a foreign country like Saudi Arabia based on the native English speaking teachers' performance skills and non-native English speaking teachers' performance skills. This will also help new researchers conduct similar research and explore another new research world.

A. Material Studied

In sociolinguistic interviews for a cross-cultural marriage study project, 27 out of 73-second language (L2) users of English and German claimed to have attained high-level competency in their L2 and could pass for native speakers in some situations (Piller, 2002). Similarly, Copland et al. (2003) demonstrate that in the setting of the young learner classroom, instructors who are familiar with the children's first language have a more extensive repertoire of teaching and can thus give more language learning chances. They also concluded that NESTs (Native English-speaking teachers) should actively study their students' languages to deliver a psycholinguistically, sociolinguistically, and pedagogically good learning experience (Copland et al., 2003). Another research shows the distinctive natures of non-native and native English-speaking teachers from the students' perspective. The results show a significant difference between native and non-native English teachers. The findings show that non-native instructors are better at in-class teaching and administration than native English-speaking teachers.

However, native English teachers are better at in-class communication and have more favorable characteristics. The findings will benefit both native and non-native instructors in identifying and raising awareness of their inadequacies (Ustunluoglu, 2007). Another contrasting result shows that the ultimate goal of L2 learning should be measured in terms of L2 knowledge. There is no reason why the L2 component of multicompetence should be the same as the L1 component of monolingualism, if only because multicompetence is inherently more complicated. Whether one agrees that some L2 users can pass for native speakers or not, these passers make up a tiny proportion of L2 users (Cook, 1999). Non-native instructors had lower self-confidence than EIL teachers, emphasizing native teachers' superiority. However, after participating in panel discussions, they were able to see their advantages over native teachers (Tajeddin et al., 2019).

Recent research, however, has found the opposite to be true in the case of native English speakers. Recent research has started to disentangle the ideological tangle of nativeness, proving that native speaker status is as much a result of the race, accent, nationality, and cultural familiarity as language proficiency (Aneja, 2016). So, it shows those non-native teachers who know students' mother tongue has the upper hand in their classroom. Sometimes some non-native speakers surpass the native speakers' competencies, expert speaking and pronunciations (Alshahrani, 2016). However,

all these perceptions about the non-native English teachers are general and overall but not specific or skilled based on the native, and non-native teachers, which were not studied at all (Moskovsky & Picard, 2018).

However, all of the non-native educators on the panel agreed that English is now being used as a lingua franca worldwide to promote communication (Tajeddin et al., 2019). As a result, the needs of native English-speaking teachers are no longer prioritized because language is mutually intelligible. Another comparison research reveals two distinct characteristics of both types of teachers. Native teachers rely on extending their language more than non-native teachers (Rámila Díaz, 2008). Eliciting rather than clarifying terms in the classroom is more crucial.

Similarly, another study minimizes the need for native English-speaking teachers as their performances are not so widely prominent. Wang and Fang (2020)   finds that Stakeholders do not see a substantial difference between the two types of English instructors; according to findings gathered through a questionnaire and interviews at a university in southeast China, NESTs cannot be defied justly but do not see a substantial difference between the two types of English instructors because of their native-speaker status.

Again, from the ideological point of view, native English-speaking teachers in the classroom teaching are stringent and adherent to their beliefs and methods. However, the study shows nothing differs between both perspectives. Kesevan et al. (2018) discover that much previous research in this area has concentrated on either instructors' classroom beliefs or behaviors. So yet, no scientific evidence exists to back up the popular notion that native and non-native English teachers have distinct teaching beliefs and methods. Tatar (2019) finds out that local teachers mean that non-native teachers are better in teaching methods and native teachers are better in the use of language. The native-speaker criterion was given higher weight by participants from schools that employed both expatriate and local instructors.

Moreover, administrators believed that local instructors were more informed about teaching methods, whereas expatriate teachers were better at language. Again, nominating students to speak in the classroom with questions and answering local teachers' logic to equal speaking time is more logical than native teachers' strategies. Kesevan et al. (2018) show that native ETAs prefer to employ open floor nomenclature when asking questions in the classroom. The pupils choose whether or not to respond to the teacher's queries. Students are under less pressure to engage verbally in this sort of nomination. Meanwhile, Malaysian instructors argue that individual nomination leads to more classroom involvement. Individual nomination, they think, helps to distribute turns equitably and allows the instructor to assess each learner's comprehension.

Here another study shows the supremacy of native English-speaking teachers only in pronunciation and broader cultural knowledge. NESs have a more exact and conventional pronunciation and a more comprehensive range of cultural knowledge. According to the instructor participants, the teaching method is more fluid and dynamic, focusing on communication than grammar (Wang & Fang, 2020). On the other hand, native English-speaking teachers seem to be more tolerant of errors than non-native English-speaking teachers. According to some researchers, there is some evidence that the two categories of teachers have distinct teaching styles and, as a result, different tactics. Natives, for example, appear to be more forgiving of students' mistakes, and non-natives may be more devoted to teaching (Rámila Díaz, 2008).

Finally, we can conclude that English is no more the language of the native; instead, it has become the international language. So the superiority of native English-speaking people is no longer seen as the standard. As Tajeddin et al. (2019) found out, EIL was viewed well by native English-speaking teachers. They were all aware that English is spoken by non-native speakers and non-native English speakers worldwide. They also felt that English had become the dominant language in both business and education and that this had had a significant impact on its users worldwide. However, all but one of them agreed that English is a language that belongs to native speakers.

With the oil boom in the 1930s, English gained broadly applied in commerce, but the government did not implement it in the curriculum until the 1950s. The Scholarship Preparation School (SPS) in Makkah, founded in 1936 to prepare Saudis to travel abroad and receive a Western education, was the first place in Saudi Arabia where English was taught (Alshahrani, 2016). The development of ELT was gradual because Saudi Arabia was still a young and impoverished country at the moment of integration. The first college in Mecca, established in 1949, required English as a subject for two hours per week for four years, and the first university in Mecca (King Saud University), established in 1957, featured an English department (Al-Abed Al-Haq Smadi, 1996 as cited in Faruk, 2014). As a result, the English language has a short history in Saudi Arabia.

Nonetheless, the government uses various methods to popularize English. The government's Scholarship program, which dates back to the 2000s, has been crucial in this nation-building endeavour. The scholarship program, which entails paying a huge number of Saudi nationals' tertiary studies at foreign universities, is essentially a massive investment in human resources - a campaign to upskill a new generation of Saudis in order to establish a highly educated, competent, and knowledgeable kingdom (Moskovsky & Picard, 2018).

With economic power came a tremendous influx of people, particularly employees and household labourers, and Saudis began using English as a lingua franca. As a result, they recognize the importance of English. Furthermore, a significant influx of non-Arab speaking migrant skilled and unskilled labourers and millions of non-Arab pilgrims resulted in the significant development of ELT in the late 1970s and early 1980s. English was viewed as crucial to sustaining the country's economic status since it was the only language of interaction between Arabs and non-Arabs on the one hand and a portal into the non-Arab world on the other (Faruk, 2014).

As a result, the Saudi government recognizes the importance of English in all of these fields. English holds a unique role in the Saudi community for various social, cultural, historical, and economic reasons (Moskovsky & Picard, 2018). In Saudi Arabia, English is now taught at all levels of education, from primary to university. They hire English instructors from all over the world. They hire both native English speakers and non-native English teachers.

On the other hand, they have opposing views on native and non-native teachers. As an English university instructor, I witnessed students' differing attitudes and impressions of non-native and native English professors. That sparked my interest and motivated me to start the research.

B. Research Objectives

The research objective was to find out the different perceptions of Saudi students about native English-speaking teachers and non-native English teachers at Jazan University. The students' perceptions proved who were better English teachers in teaching English in Saudi Arabia. The students' perception was measured from different angles like language skills, reading, writing, listening, speaking, and teaching grammar.

II. RESEARCH METHODOLOGY

Fifty native English-speaking teachers and fifty non-native English teachers taught twenty groups of five hundred students at Jazan University in Saudi Arabia. Non-native English teachers were from India, Bangladesh, Pakistan, Sudan and Jordan, where English is not their native language. In contrast, teachers from Canada, U.K and America were native English-speaking teachers. Most non-native English teachers had B.A. honours and masters in English language and literature; some have Applied Linguistics and ELT background with teaching experience of more than ten years. Similarly, native English-speaking teachers had TESOL or any Diploma in English language teaching. Both types of teachers were assigned to teach reading, writing, listening, speaking and grammar in the same groups. They used to teach them throughout the semester. After the semester, students' perceptions of 50 native English-speaking teachers and 50 non-native English-speaking teachers about the teaching performance were collected through the Likert scale from the students for analysis. A non-parametric Chi-square test was conducted to find out the result of the students' perceptions. A pilot study was conducted to rectify the scale and questionnaire, and the validity and reliability of the scale were also tested.

A. Research Hypothesis

There is no significant difference in students' perception of native English-speaking teachers and non-native English-speaking teachers.

B. H1 Hypothesis

There is a significant difference in students' perception of native and non-native English-speaking teachers.

III. RESULT AND ANALYSIS

A Chi-Square test of Independence was conducted after collecting the data from the students after the semester was over. Below, the test result has been presented and analyzed.

A. Perception of Reading Skills

TABLE 1

Teachers * Reading skill Cross Tabulation						
			Reading skill			Total
			good	very good	Excellent	
Teachers	NEST	Count	0	16	34	50
		% within Teachers	0.00%	32.00%	68.00%	100.00%
		% within Reading skill	0.00%	34.80%	64.20%	50.00%
	NNEST	Count	1	30	19	50
		% within Teachers	2.00%	60.00%	38.00%	100.00%
		% within Reading skill	100.00%	65.20%	35.80%	50.00%
Total		Count	1	46	53	100
		% within Teachers	1.00%	46.00%	53.00%	100.00%
		% within Reading skill	100.00%	100.00%	100.00%	100.00%

The table above shows that an equal number of native English speaking (NEST) and non-native English-speaking Teachers (NNEST) took part in teaching reading skills during the semester. Among the 50 native English-speaking

teachers, 0% of the teachers were good, 32% were very good, and 68% were excellent in teaching reading according to the students' perceptions. On the other hand, 2% of the non-native English-speaking teachers were good, 60% were very good, and 38% were excellent in teaching reading skills. Here native English-speaking teachers outperformed the non-native English-speaking teachers.

TABLE 2

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.506a	2	0.009
Likelihood Ratio	10.019	2	0.007
Linear-by-Linear Association	9.401	1	0.002
N of Valid Cases	100		
a 2 cells (33.3%) have expected count less than 5. The minimum expected count is .50.			

According to the Chi-Square Test Independence, the p-value is 0,009, which is smaller than the alpha=0.05. So, we rejected the null hypothesis and accepted the H1 hypothesis that there was a significant difference between the perception of native English-speaking teaching and non-native English- speaking teachers in teaching reading skills.
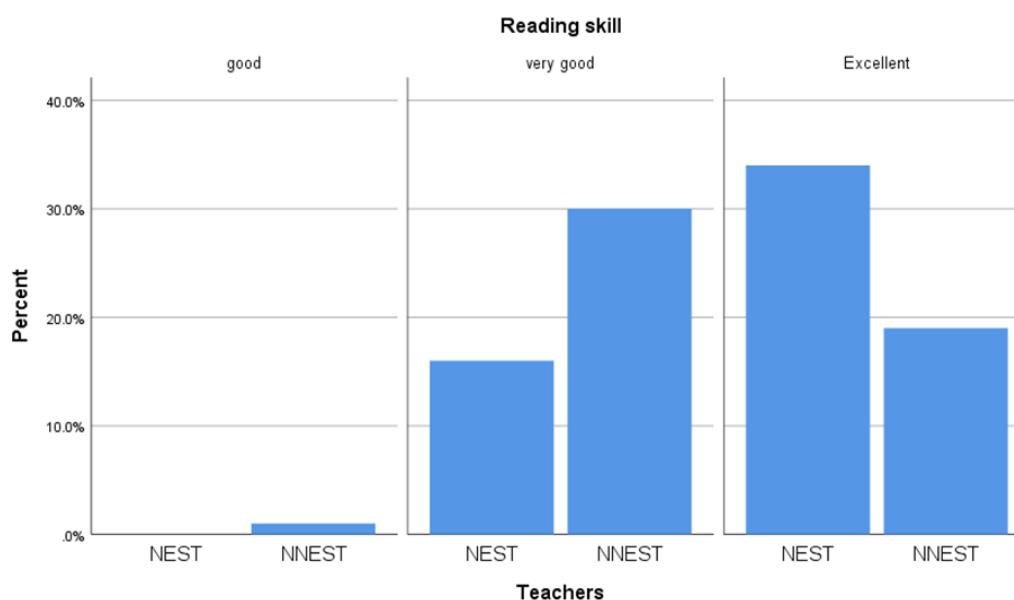
Graph 1

According to the bar chart above, most native English-speaking teachers were excellent in teaching reading skills, whereas average non-native English- teachers were very good at teaching reading skills.

B. *Perception of Writing Skills*

TABLE 3

			Writing Skill			Total
			good	very Good	Excellent	
Teachers	NEST	Count	0	19	31	50
		% within Teachers	0.00%	38.00%	62.00%	100.00%
		% within Writing Skill	0.00%	73.10%	47.70%	50.00%
	NNEST	Count	9	7	34	50
		% within Teachers	18.00%	14.00%	68.00%	100.00%
		% within Writing Skill	100.00%	26.90%	52.30%	50.00%
Total		Count	9	26	65	100
		% within Teachers	9.00%	26.00%	65.00%	100.00%
		% within Writing Skill	100.00%	100.00%	100.00%	100.00%

*Teachers * Writing Skill Cross Tabulation*

Here, 19% and 31% of the native English-speaking teachers were excellent at successfully teaching writing skills. In comparison, 18%, 14% and 68% of the non-native English-speaking teachers were good, very good and excellent successively in teaching writing skills according to the students' perception. Here non-native teachers had more mastery in teaching writing skills than native English teachers.

TABLE 4

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.677a	2	0.001
Likelihood Ratio	18.369	2	0
Linear-by-Linear Association	0.836	1	0.361
N of Valid Cases	100		
a 2 cells (33.3%) have expected count less than 5. The minimum expected count is 4.50.			

According to the Chi-square Test, P= 0.001, smaller than alpha= 0.05, compelled us to reject the null hypothesis. So, we could say that there was a significant difference in the perception of the NEST and NNEST, which meant non-native teachers were better than native English-speaking teachers in teaching writing skills.
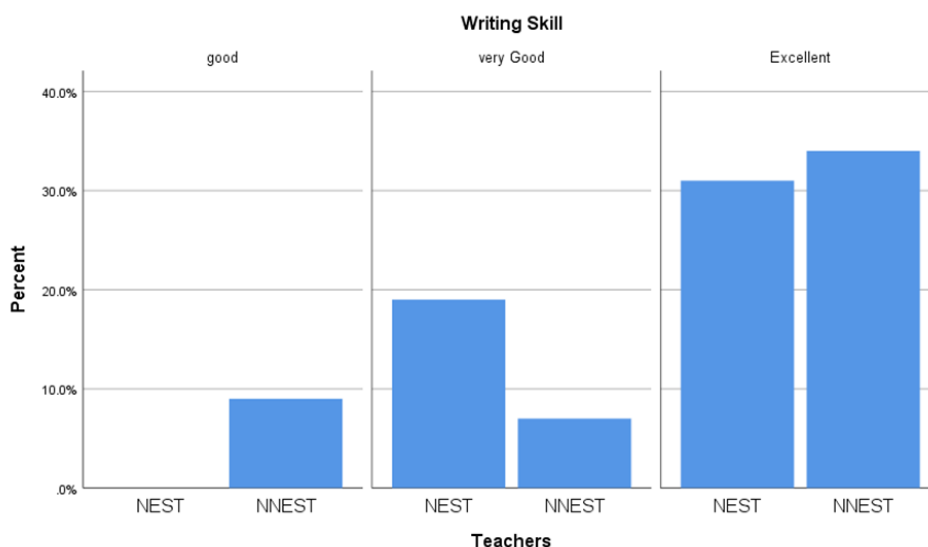
Graph 2

In the graph above, native English-speaking teachers dominated students' "very good" perception of students over non-native English teachers. However, non-native English-speaking teachers dominated over the native English teachers in the 'excellent' perception of the students.

C. Perception of Speaking Skills

TABLE 5

Teachers * Speaking Skill Cross Tabulation					
			Speaking Skill		Total
			very Good	Excellent	
Teachers	NEST	Count	16	34	50
		% within Teachers	32.00%	68.00%	100.00%
		% within Speaking Skill	39.00%	57.60%	50.00%
	NNEST	Count	25	25	50
		% within Teachers	50.00%	50.00%	100.00%
		% within Speaking Skill	61.00%	42.40%	50.00%
Total		Count	41	59	100
		% within Teachers	41.00%	59.00%	100.00%
		% within Speaking Skill	100.00%	100.00%	100.00%

In the table above, we can see the dominance of the native English-speaking teacher in teaching speaking skills as 32%, and 68% of the native English speakers were very good and excellent. On the other hand, non-native English-speaking teachers performed a little less than native English-speaking teachers.

TABLE 6

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.348a	1	0.067		
Continuity Correctionb	2.646	1	0.104		
Likelihood Ratio	3.37	1	0.066		
Fisher's Exact Test				0.103	0.052
Linear-by-Linear Association	3.315	1	0.069		
N of Valid Cases	100				
a 0 cells (0.0%) have expected count less than 5. The minimum expected count is 20.50.					
b Computed only for a 2x2 table					

In the Chi-square Test result, we observed that the p-value was 0.067, higher than the alpha of 0.05. So, we failed to reject the null hypothesis, which meant there was no significant difference between the perception of NEST and NNEST in teaching speaking skills.

Speaking Skill
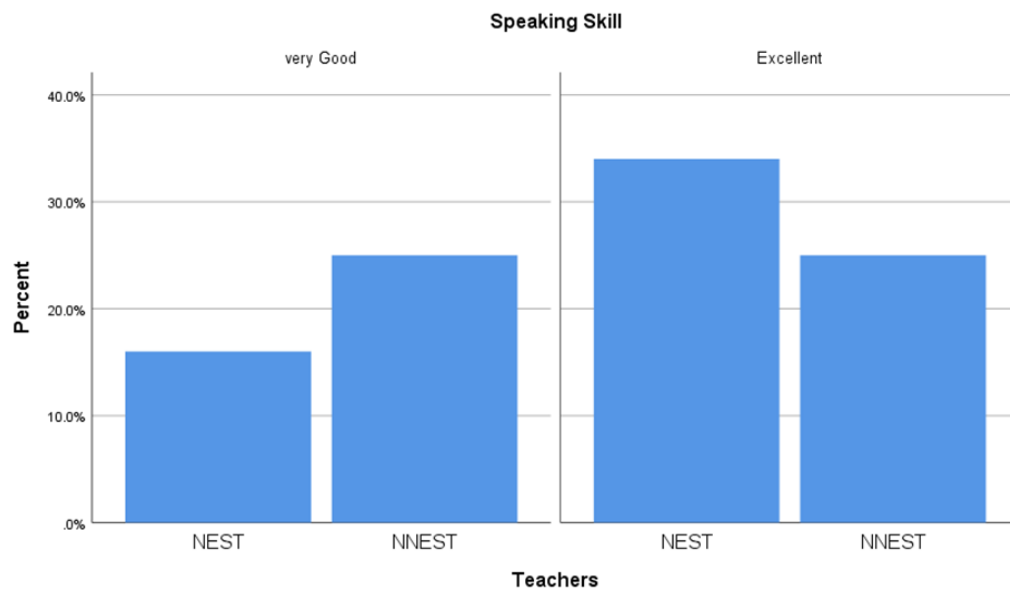
Graph 3

The graph above shows the similarities as it was in the table above. Here an equal number of teachers from both groups had very good perceptions of the students, while a few NESTs had an excellent perception of the students.

D. Perception of Listening Skills

TABLE 7

			Listening Skill		Total
Teachers * Listening Skill Cross Tabulation					
			very Good	Excellent	
Teachers	NEST	Count	31	19	50
		% within Teachers	62.00%	38.00%	100.00%
		% within Listening Skill	57.40%	41.30%	50.00%
	NNEST	Count	23	27	50
		% within Teachers	46.00%	54.00%	100.00%
		% within Listening Skill	42.60%	58.70%	50.00%
Total		Count	54	46	100
		% within Teachers	54.00%	46.00%	100.00%
		% within Listening Skill	100.00%	100.00%	100.00%

From the table above, we found that native English-speaking teachers had a very good and excellent performance perception in teaching listening skills. 62% and 38% of the native English-speaking teachers were very good and excellent in teaching listening skills. However, almost an equal number of teachers were very good and excellent in the students' perception, like 46% and 54% of the NNEST were very good and excellent in teaching listening skills.

TABLE 8

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
			Chi-Square Tests		
Pearson Chi-Square	2.576a	1	0.108		
Continuity Correctionb	1.973	1	0.16		
Likelihood Ratio	2.588	1	0.108		
Fisher's Exact Test				0.16	0.08
Linear-by-Linear Association	2.551	1	0.11		
N of Valid Cases	100				
a 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.00.					
b Computed only for a 2x2 table					

The Chi-square test found that the p-value was 0.108, which was greater than the alpha of 0.05. So, we failed to reject the null hypothesis, which indicated no significant difference in perception between NEST and NNEST in teaching listening skills.
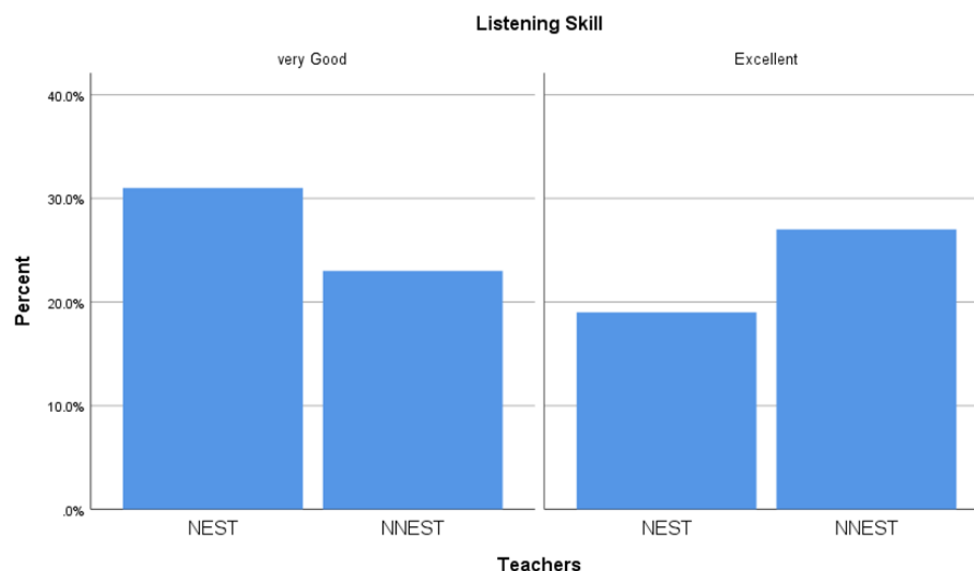
Graph 4

The graph above also proved the null hypothesis that there was no significant difference between the perception of the NEST and NNEST. Although a very good and excellent perception of NEST was higher than NNEST, this was not significant.

E. Perception of Grammar Teaching

TABLE 9

			Grammar			Total
			good	very Good	Excellent	
Teachers	NEST	% within Teachers	52.00%	36.00%	12.00%	100.00%
		% within Grammar	100.00%	64.30%	13.00%	50.00%
	NNEST	% within Teachers		20.00%	80.00%	100.00%
		% within grammar		35.70%	87.00%	50.00%
Total		% within Teachers	26.00%	28.00%	46.00%	100.00%
		% within Grammar	100.00%	100.00%	100.00%	100.00%

Teachers * Grammar Crosstabulation

From the table above, we can observe that a few native English-speaking teachers (12%) got an excellent perception from the students, 52% of teachers were in very good perception, and 36% of the NEST were in a very good perception of the students. However, NNEST had extraordinary dominance in teaching grammar as 80% of the teachers of this group were excellent, and 20% of teachers were very good at teaching grammar.

<div align="center">TABLE 10</div>

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	53.416a	2	0
Likelihood Ratio	66.508	2	0
Linear-by-Linear Association	52.412	1	0
N of Valid Cases	100		
a 0 cells (0.0%) have expected count less than 5. The minimum expected count is 13.00.			

The Chi-square test shows that the p-value is 0.00, more diminutive than alpha, 0.05. So, the null hypothesis was rejected, and the alternative hypothesis was accepted. So, there was a significant difference between the perception of NEST and NNEST. Non-native English teachers were far better than native English-speaking teachers, especially in teaching grammar.
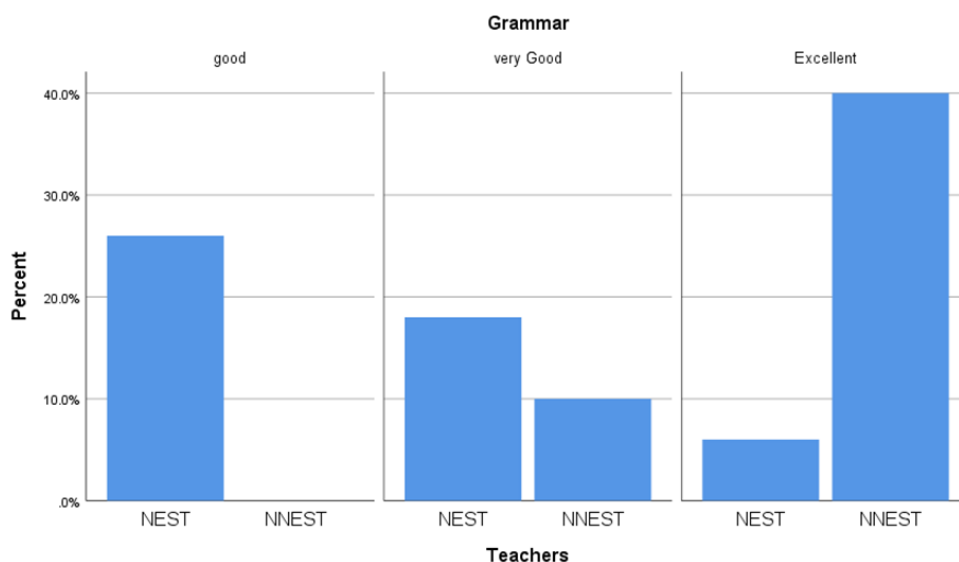
<div align="center">Graph 5</div>

The graph above shows that non-native English-speaking teachers were better than native English-speaking teachers. Native English-speaking teachers excelled in excellent and good perception, while many non-native teachers outperformed in excellent perception in teaching grammar.

IV. FINDINGS

From the above analysis of the result, we found that English-speaking teachers were good at some aspects of language skills, and non-native English-speaking teachers were good at some other aspects of English language skills.
- In reading skills, native English-speaking teachers performed very well according to the students' perceptions. However, most non-native English teachers had an excellent student perception, which was not negligible.
- In writing skills, non-native English teachers had a comparatively better perception of the students since they knew how to learn writing in a second language. So, they were also good at teaching the same skills.
- Native English-speaking teachers had excellent dominance in teaching speaking skills since they had actual pronunciation and accent and acquired the skill. Here non-native English-speaking teachers had a little less excellent perception of the students.
- We also found the students' very good and excellent perception of teaching listening skills. Non-native English teachers had a poor perception of teaching listening skills.
- In teaching grammar, non-native teachers had a better perception of the students because they learned the language by memorizing and understanding the grammatical rules. So, they were very good at teaching

grammar.
- Non-native English teachers were very strict with error correction, while native English-speaking teachers were a bit lenient in errors correction.

V. Discussion

A language has four skills, two receptive skills, like reading and listening and two productive skills, like writing and speaking. Among these skills, native English teachers are very good at teaching listening and speaking skills, while non-native English teachers are very good at reading and writing. Moreover, non-native teachers are excellent at teaching grammar. For spoken English, native English-speaking teachers have a very good perception of the students. Similarly, they also have very good perceptions about teaching listening skills. This is because of the nativization of the language, which is not possible by non-native English teachers, and this is the drawback we can find out from this research.

On the other hand, non-native teachers are very good at teaching grammar, reading and writing. It is like a medical doctor who has suffered from some diseases, and then he becomes a doctor of those diseases. So, he knows the symptoms of the diseases and what the remedies for those particular diseases are. So, the research shows that native English-speaking teachers are better than non-native teachers at teaching listening and speaking. In comparison, non-native teachers are better at teaching reading, writing and grammar.

VI. Conclusion

Saudi students' perception of native and non-native English-speaking teachers shows that none teachers are perfect in teaching all language skills. Some of the teachers of both types are very good at productive skills and are very good at receptive skills. However, according to students' overall perception, non-native English teachers have a better perception of Saudi students. This study brings forth the perception of the Saudi Students and the performances of NEST and NNEST. Maybe, the Saudi government will hire more teachers from countries where English is the second language, not the mother tongue. This research also will help the Saudi authority assign teachers based on their native language and second language. The educationists and new researchers will find assistance from this study to carry out further study on this subject to find out the setbacks and advantages of NEST and NNEST to guide the authorities and overcome the drawbacks.

References

[1] Al-Seghayer, K. (2014). The Four Most Common Constraints Affecting English Teaching in Saudi Arabia. *International Journal of English Linguistics*, *4*(5), 17–26. Retrieved December 25, 2021, from https://doi.org/10.5539/ijel.v4n5p17

[2] Alrashidi, O., & Phan, H. (2015). Education context and English teaching and learning in the Kingdom of Saudi Arabia: An overview. *English Language Teaching*, *8*(5), 33–44. https://doi.org/10.5539/elt.v8n5p33

[3] Alshahrani, M. (2016). A Brief Historical Perspective of English in Saudi Arabia. *An International Peer-Reviewed Journal*, *26*(2009), 43. www.iiste.org

[4] Aneja, G. A. (2016). Rethinking Nativeness: Toward a Dynamic Paradigm of (Non)Native Speaking. *Critical Inquiry in Language Studies*, *13*(4), 351–379. https://doi.org/10.1080/15427587.2016.1185373

[5] Braine, G. (2010). Nonnative speaker English teachers: Research, pedagogy, and professional growth. In *Nonnative Speaker English Teachers: Research, Pedagogy, and Professional Growth*. https://doi.org/10.4324/9780203856710

[6] Cook, V. (1999). Going beyond the Native Speaker in Language Teaching. *TESOL Quarterly*, *33*(2), 185. https://doi.org/10.2307/3587717

[7] Copland, F., Yonetsugi, E., & Head, D. (2003). I am teaching English to young learners: supporting the case for the bilingual native English speaker teacher. *Journal of Organometallic Chemistry*, *666*(1–2), iii. https://doi.org/10.1016/s0022-328x(02)02201-5

[8] Faruk, S. M. G. (2014). Chinese and Saudi English Language Education Policies: A World-System Perspective. *Romanian Journal of English Studies*, *11*(1), 264–271. https://doi.org/10.2478/rjes-2014-0030

[9] Kesevan, H. V., Madzlan, N. A., & Kanapathy, K. (2018). Native and Non-native English Teachers' Classroom Ideologies and its Implementation in ESL Classroom. *International Journal of Applied Linguistics and English Literature*, *7*(7), 158. https://doi.org/10.7575/aiac.ijalel.v.7n.7p.158

[10] Moskovsky, C., & Picard, M. (2018). English as a foreign language in Saudi Arabia: New insights into teaching and learning English. In *English as a Foreign Language in Saudi Arabia: New Insights into Teaching and Learning English*. https://doi.org/10.4324/9781315688466

[11] Piller, I. (2002). Passing for a native speaker: Identity and success in second language learning. *Journal of Sociolinguistics*, *6*(2), 179–208. https://doi.org/10.1111/1467-9481.00184

[12] Rámila Díaz, N. (2008). A Comparative study of native and non-native teachers' scaffolding techniques in SLA at an early age. *A Comparative Study of Native and Non-Native Teachers' Scaffolding Techniques in SLA at an Early Age*, *17*(17), 57–73. https://doi.org/10.5209/rev_EIUC.2009.v17.8490

[13] Tajeddin, Z., Atai, M. R., & Shayeghi, R. (2019). Native and non-native teachers' changing beliefs about teaching English as an international language. *International Journal of Society, Culture and Language*, *7*(2 Special issues), 1–14.

[14] Tatar, S. (2019). Employment of English language teachers in an EFL context: Perspectives from school administrators. *Profile: Issues in Teachers' Professional Development*, *21*(2), 45–61. https://doi.org/10.15446/profile.v21n2.72648

[15] Ustunluoglu, E. (2007). University students' perceptions of native and non-native teachers. *Teachers and Teaching: Theory and Practice*, *13*(1), 63–79. https://doi.org/10.1080/13540600601106096

[16] Wang, L., & Fang, F. (2020). Native-speakerism policy in English language teaching revisited: Chinese university teachers' and students' attitudes towards native and non-native English-speaking teachers. *Cogent Education*, *7*(1), 1–23. https://doi.org/10.1080/2331186X.2020.1778374

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N-Words in Dawurotsuwa

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Abstract—**This article investigates n-words in Dawurotsuwa, which is classified under the Omotic language family under the Afroasiatic phylum. Speakers of the language are found in Ethiopia, specifically in the southwest part of the country. The study aims to describe n-words in this language, which is one of the scarcely described languages in the area. N-words in the language are formed by suffixing the morpheme -*kka/-nne* to content question words. These morphemes also mark indefiniteness in the language. These formed n-words express negation in fragmented answers but don't in a complete main clause. In the main clause, they are accompanied by sentential negative markers to transfer negative meanings. In Dawurotsuwa, n-words are not inherently negative. These n-word-forming morphemes -*nne* and -*kka* are also used for coordinating conjunction and emphatic coordination, respectively. The morpheme -*kka* also serves as a scalar focus suffix. They also express a specificity that is indefinite, but when the specificity is definite, the last vowel changes to -*o* and becomes only -*kko*. Thus, n-words can be named indefinite pronouns.**

Index Terms—**n-word, negative, scalar, indefinite**

I. INTRODUCTION

This article investigates n-words in Dawurotsuwa, which belongs to the Omotic language family, and is a member of the Afroasiatic phylum. KÖhler (2020) says that Omotics are located solely in the Southwest part of Ethiopia. Dawurotsuwa, the language of the current study, is found in the North Ometo cluster under the North Omotic family (Bender, 1976; Fleming, 1976).

It was Laka who created the term *n-word* for the first time. It was used in the work to label those expressions in Romance that are allowed to occur with a standard negative marker or express negation by themselves even in the absence of the standard negative marker. The name 'n-words' was given to these expressions because most of them begin with *n-* (Lake, 1990). The equivalent in Dawurotsuwa can be named *nne/kka*-words as these morphemes are suffixed to the base to form n-words. Haspelmath (1997) uses 'negative indefinite pronoun' for special indefinite pronouns that are only used in negative sentences and always express negation; in some languages, these indefinite pronouns are sufficient to express sentential negation by themselves. The term 'negative polarity items' is also used to refer to those indefinite pronouns which can occur in the absence of the negative operator, such as within conditionals and interrogatives (Haspelmath, 1997).

N-words in Dawurotsuwa are formed by attaching morpheme -*nne/-kka* to content questions words like *Ɂáyáá* 'what'. There are similar examples in the world's languages like Polish which marks by means of suffixes such as -*s, -kolwiek* (Haspelmath, 1997).

This article is organized as follows: in Section (II) n-words will be discussed. Under this section, their occurrences, scalar meanings, and types will be dealt with. Then in Section (III), the relation between the focus marker and the negative operator will be discussed. In the last section, a brief etymological source of the negative markers will be provided.

II. N-WORDS

It is not easy to describe the occurrences and meanings of n-words because they are diverse in the world's languages. This diversity makes it difficult for n-words to formulate the structural or meaning characteristics to identify them. However, there are some points to identify their occurrences (Giannakidou, 2006). Thus, in this article, n-words in Dawurotsuwa are identified based on the following definition:

(1) **N-word:**

An expression α is an n-word iff:

(a) α can be used in structures containing sentential negation or another α-expression yielding a reading equivalent to one logical negation; and

(b) α can provide a negative fragment answer (Giannakidou, 2006, p.328)

Penka (2006) says n-words consist of both negative and indefinite meanings. When a negative marker and two or more n-words in a clause result in a single negative interpretation, it is named 'Negative Concord' (NC) (Giannakidou & Zeijlstra, 2017). The following table gives the standard negation markers in Dawurotsuwa. This paradigm will help to note the relation between the negative markers and n-words forming morphemes morphologically.

Persons	Verb Paradigm	Negative Morpheme
1SG	b-á-bétkk-e	-kk-
2SG	b-á-bétkk-a	-kk-
3SGF	b-á-bétkk-u	-kk-
3SGM	b-íbéé-nn-a	-nn-
1PL	b-íbétkk-o	-kk-
2PL	b-íbétkk-ita	-kk-
3PL	b-íbétkk-ino	-kk-

In (2), morpheme *-nn-* is a sentential negative marker for 3SG.M. For the remaining persons, it is *-kk-*. There is no other element found in this sentence that expresses negation. On the other hand, in (3), *ʔáyáá-nne/-kka* 'nothing' functions as a negative reply to an affirmative interrogative. As we can see, the indefinite pronoun consists of elements similar to the sentential negative marker *-nn-/-kk-*. However, *ʔáyáá-nne/-kka* which expresses negation in the fragment fails to express negation when it occurs with the sentential negation as in (4a). It has been functioning as a negative reply in (3). It should be noted that the gloss 'nothing' doesn't represent the equivalent meaning for the Dawurotsuwa *ʔáyáá-nne/-kka* version. The reason is that the English version is always or inherently negative, but the Dawurotsuwa's is not. This is a foundation for the discussion in (C). In addition to the negative fragment answers, n-words express negation in omitted predication in disjunction and coordination. In (4b&c), *-nne/-kka* doesn't co-occur with a sentential negative marker, but it does express negation.

2)   *dáán-í*   *laatsa-a*   *m-éé-nn-a*
      Dáána-NOM   lunch-ACC   eat-3SG-NEG-DECL
      'Daana doesn't eat lunch'

3)   Q: *dáán-í*   *ʔáyáá*   *m-íí*
            Dáána-NOM   what   eat-3SG.M.IPFV.Q
            'What does Dana eat?'
      A: *ʔáyáá-nne/-kka*
            what-INDF
             'Nothing'

4a)   *dáán-í*   *ʔáyáá-nne/-kka*   *m-éé-nn-a*
      Dáána-NOM   what- INDF   eat-3SG.M-NEG-DECL
      'Dana doesn't eat anything'

b)   *táán í*   *ʔaŠu-a*   *m-áná*   *wókkó hárá*
      1SG.NOM   meat-ACC   take-FUT   or   other
      ʔaya-nne/-kka
      who- INDF
      'I will eat meat or nothing else'

c)   *nééní*   *darua*   *ʔakk-áá-dd-a*
      2SG.NOM   a lot   take-2SG-PFV-DECL
      poli   *ʔáyá-nne/-kka*
      Pola.NOM   what- INDF
      'You have taken a lot, and Pola nothing!'

A. Functions of -nne/-kka Morpheme

Before going into details, let us observe various occurrences of the morpheme *-nne/-kka* in the language. In Dawurotsuwa *-nne/-kka* has multiple meanings. These various functions can't be represented with a single marker in the glossing. Thus indefinite aspect will be glossed in this study.

One of the functions is that it is utilized as a coordinating suffix. Only *-nne* serves this function; *-kka* is not employed for this. In (5a), *-nne* functions as a connecting suffix while the use of *-kka* makes it unacceptable, as in (5b).

5a)   *dáán-ínne*   *ʔánjóór-á*   *deʔ-iino*
      Dana-NOM-and   Anjore-NOM   exist-3PL.IPFV.DECL
      'Dana and Anjore are students'
b)   **dáán-íkka*   *ʔánjóórá*   *deʔ-iino*
      Intended: 'Dana and Anjore exist'

The morpheme *-kka* is also used for emphasized coordination, as in (6a). When the coordinates are more stressed than other elements of the sentence, the morpheme *-kka* is attached to both nominals in the coordination. The morpheme *-nne* is not used in this context because it is used in ordinary coordination, and not attached to two coordinates at the

same time, as in (6b).

6a) *d áán- íkka*   *ʔánjóór- á-kka*   *ʔá*
      Dana-NOM-and.EMP   NOM-and.EMP   3SG.M.ACC
      ʔer- éé-dd-ino
      know-3PL-PFV-DECL
      'Both Dana and Anjore have known him'

b) * *d áán- ínne*   *ʔánjóór- á-nne*   *ʔá*   *ʔer- íkk-ino*
      Intended: 'Both Dana and Anjore don't know him'

In Dawurotsuwa, the morpheme *-kka* also describes emphatic negative coordination, as in (7). Although the nominals that are attached with this morpheme, i.e., *d áán- í* and *ʔánj óór- á* in the example (7) below are negative alternatives that none of them knows the person referred to, the standard negative marker *-kk-* is suffixed to the main verb. As we can see, in both affirmative (6a) and negative (7) emphatic coordination, the same morphological element *-kka* is used. The difference lies in the attachment of the negative marker to the main verb.

7) *d áán- íkka*   *ʔanjóór- á-kka*   *ʔá*
     Daana-NOM-and.EMP   Anjore-NOM-and.EMP   3SG.M.ACC
     ʔer- íkk-ino
     know-3PL-NEG-DECL
     'Neither Dana nor Anjore knows'

In addition, *-kka* morpheme is used to represent omitted elements that may agree or disagree with an antecedent. In (8a), the sentence is affirmative. The second speaker in (8b) attaches *-kka* to 1SG.NOM by omitting the predicate to express that he shares the same situation as in (a).

8a) *g újj- í*   *laas'a-a*   *m- éé-dd-a*
      Guj-NOM   lunch-ACC   eat-3SG.M-PFV-DECL
      'Gujja has eaten the lunch.'

b) *t áán íkka*
      1PL.NOM-also
      'Me too'

Moreover, the same morpheme *-kka* is used to represent the omitted negative antecedent predicate. In (9a) the sentence is negative. The second speaker in (9b) attaches *-kka* to 1SG.NOM by omitting the negative predicate to express that he shares the same situation as in (a). As we can see, the same morphological element *-kka* is used for representing both affirmative (8b) and negative (9b) predications when they are omitted.

9a) *g újj- í*   *laas'a-a*   *m- íb éé-nn-a*
      Guj-NOM   lunch-ACC   eat-3SG.M-PFV-DECL
      'Gujja has not eaten the lunch.'

b) *t áán íkka*
      1PL.NOM-also
      'Neither me'

There is another morpheme *-kko* which is similar to the *-nne/-kka* phrase morpheme *-kka* in element *-kk-* but different in its final vowel *-o* and *-a.* This morpheme *-kko* is used to express vocative. It describes a direction in which something or someone heads on as in (10). On the other hand, this morpheme is also used for expressing specific indefinite situation as in (10b).

10a) *dug é-kko*
      down-VOC
      'in down word direction'

b) *ʔóóna-kko*   *soo-n*   *deʔ-ee*
     Who-INDF   home-LOC   exist-3SG.M.DECL
     'Somebody is at home'

Moreover, morpheme *-kka* is used to express addition to what is already available. In example (11), Guja is just an additional person to those who are already in the house. In this usage, it is not possible to use *-nne*. This shows that *-nne* and *-kka* overlap functionally to a certain extent but they are not synonymous.

11a) *g újj- íkka*   *soo-n*   *deʔ-ee*
     Gujja-NOM-also   home-LOC   exist-3SG.M.DECL
     'Guja also exists at home'

b) * *g újj- ínne*   *soo-n*   *deʔ-ee*
     Intended: 'Guja also exists at home'

Furthermore, *-kka/-nne* is used for forming indefinite pronouns which serve for both affirmative and negative environment. Morpheme *-nne/-kka* combines with content question words or numeral *ʔ tt úú* 'one' to form the negative indefinite pronoun *ʔ tt í-nne/-kka*[1] 'no one' as in (12) below. This will be discussed in detail in the following section

---

[1] This has scalar implicature

(C.1).

Scalar meaning is also transferred by the morpheme *-nne/-kka*. This function is formed by attaching *-nne/-kka* to a nominal. Haspelmath (1997) labels this usage as a negative scalar focus suffix. This suffix is attached to the word *ʔ tʉ́ʔ tɨ́* or nominals to offer this scalar interpretation. Scalar interpretation involves comparison with a set of contextually-specified alternative propositions that are ordered in terms of ranking order.

> 12) *ʔittú-nne/-kka*   *y- ɨ́b éé-nn-a*
>   one- INDF   come-3SG-PFV-NEG-DECL
>   'Not even one came'

The above discussion shows that multiple functions of the morpheme can be found in a single clause. It is difficult to propose a single gloss for all those morphemes with identical elements, but it is easier to gloss the functions over consistently. In (13), the first *-nne* which is attached to *marota* is functioning as a connector while the second *-nne* which is suffixed to *galla* is serving as a scalar focus suffix. The scalar *-kka* which can substitute scalar *-nne* in (13), can't take the place of the first *-nne* which is used as a conjunctive. In the scalar position, *-nne* and *-kka* substitute each other as they are presented. Dawurotsuwa doesn't employ different elements for expressing conjunction and scalar meaning. For both functions, the same morphological elements are used.

> 13) *marota-nne*   *dar-i   ʔ tt ɨ́*
>   Marota.NOM-and   Dari.NOM one
>   *galla-nne/-kka*   *ʔatt-i-kk-ino*
>   day-INDF   work-3PL-NEG-DECL
>   'Marote and Daro don't miss class even for one day'

B. Scalar Morpheme

Indefiniteness in a lot of languages is expressed by an item that intends to convey 'even' which is a 'scalar focus particle' (Haspelmath, 1997). The meaning of 'also' and 'even' is the same to the extent of even impossible to distinguish the two. If the indefiniteness marking element is similar to an element that carries the meaning of 'also', then the root cause for this indefiniteness is the scalar function 'even' (Haspelmath, 1997). This phenomenon is clearly visible in Dawurotsuwa; 'also' and 'even' marking elements are completely the same morphologically.

In the above, we mentioned that scalar usage of *-nne/-kka* is one of the functions of this morpheme. They are used to form indefinite pronouns as well. These indefinite pronouns, which are formed by combining this morpheme and the interrogative pronoun, always co-occur with verbal negation in Dawurotsuwa, as in (13) above. This scalar meaning forming element is used for forming indefinite pronouns, which is one of the n-words.

For example (14) *-kka* is used as the focus *even* in the affirmative. In this example, *Dánsa* is the least likely person to eat the honey among persons who are expected to eat it. The scalar *-kka* is suffixed to the person named '*Dánsa*'. This element shows a hierarchy of persons in numbers who are expected to eat from the most likely to the least likely person. In this usage, *-nne* is not used. It shows that all people have eaten the honey. In the negative, as in (14b), the pragmatic scale is reversed. In (14b), the most expected person to eat is *Dansa*, unlike (14a) in which *Dansa* is the least expected person.

> 14a) *D áns- ɨ́kka*   *laafa ʔeessa-a*   *m- éé-dd-a*
>   Dansa-NOM-SFS   small honey-ACC   eat-3SG.F.M-PFV-DECL
>   'Even Dansa has eaten some honey.'
> b)   *D áns- ɨ́kka*   *laafa ʔeessa-a*   *m- ɨ́b éé-nn-a*
>   Dansa-NOM-SFS   small honey-ACC   eat-3SF.M-PFV-DECL
>   'Even Dansa has not eaten some honey.'

In example (15) the one who has the greatest probability of being helped in Pola's family is *ʔaatto* 'the mother'. This utmost expected candidate to be helped in the family is not being helped. If this utmost person is not helped, then no one is going to be supported in the family. This means that the whole members of the family are not supported by Pola. Haspelmath (1997) calls this most likely alternative 'low endpoints of the relevant pragmatic scale'; when this is accompanied by a sentential negative marker, it gives 'universal negation'.

> 15) *pol-i bare*   *ʔaatto-kka*   *maadd- énn-a*
>   pola-NOM himself   mother-SFS   help-3SG.M-NEG-DECL
>   'Pola doesn't help even his mother'

Likewise, for example (16), the most expected person to drink alcohol is 'he' among his friends, but he has not drunk alcohol. So the scalar focus suffix *-nne/kka* is attached to the 1SG.NOM in order to show the most likely alternative, but the most likely person has not done it, which is expressed by the sentential negative marker. If the most expected one is not doing it, then no one else is doing the event.

> 16) *t áán ɨ́nne/-kka*   *matsoy-ia*   *ʔuŠŠa-a*
>   1SG.NOM-SFS   intoxicate-RELZ   drink-ACC
>   *ʔuŠ- á-b éɨ́kk-e*
>   drink- 1SG-PFV-NEG-DECL
>   'Even I have not drunk alcohol'

As we can see above, the Dawurotsuwa *-nne/-kka* phrase expresses the most likely alternative in the presence of a

sentential negative marker, but it expresses the least likely alternative in the absence of a sentential negative marker. At (17), the least likely person to drink is *t áán í* but he has drunk it.

17) *t áán ínne/-kka*   *matsoy-ia*   *ʔuŠŠa-a*
    1SG.NOM-SFS   intoxicate-RELZ   drink-ACC
    ʔuŠ- áá-dd-i
    drink- 1SG-PFV-DECL
    'Even I have drunk alcohol'

When the morpheme *-nne/-kka* is attached, the meaning it conveys is based on the members in the sequence to be compared. The members don't have an equal likelihood of accomplishing an event or a situation. The members are sequenced according to their hierarchy from most likely to the least likely status. The most or the least is determined by the presence or absence of a sentential negative marker. If there is the sentential negative marker, the morpheme gives the most likely alternative and vice versa.

On the other hand, *-nne/-kka* can be used to express an unspecified item, as in (18a). In this example, there is no ranking interpretation. Rather, it expresses the number of elements of the referents. The number can be one, two, three, or more, but *deeŠŠ-* 'goat' can be any one of the considered referents. There is no 'the most or the least' expected item among the members. All have equal chances, i.e. *deeŠŠ-,* to be taken by Pola in the example (18a). When the morpheme is suffixed to plural nouns, it is unacceptable, as in (18b).

18a) *pol-i*   *ʔittí deeŠŠ-a-nne/-kka*   *ʔakk-i-bee-nn-a*
    Pola-NOM   one goat-ACC-INDF   take-3SG.M-PFV-NEG-DECL
    'Pola has not taken even one goat'

b) **pol-i ʔittí deeŠŠa-tua-nne/-kka*   *ʔakk-i-bee-nn-a*
    Pola-NOM one goat-PL.ACC-INDF   take-3SG.M-PFV-NEG-DECL

In the sentence (19a), morpheme *-nne/-kka*, which expresses negation in (3 & 4) independently above, doesn't play that role here in collaboration with the sentential negative marker. It is the sentential negative marker that plays the role of expressing negation. The phrase that is formed of *-nne/-kka* contributes to the negation. If the morpheme is expected to contribute to the negation as in (19a), it is accompanied by the sentential negative marker. This contribution is made irrespective of its place of occurrence in a clause. The place where they appear doesn't make any difference in its contribution. Whether they occur in the subject position, as in (19b), or object as in (19a), they require a sentential negative marker to contribute to the negation. In this respect, *-nne/-kka*-phrases have a strict pattern in the language. The places where they are located in a clause don't make them omit the licenser, i.e., sentential negative marker. The morpheme can also occur in the absence of the sentential negative marker but doesn't contribute to the negation, as in (20a-d).

19a) *pol-i*   *ʔittí ʔiŠaa-nne/-kka*   *maadd- énn-a*
    Pola-NOM   one brother.ACC-INDF   help-3SG.M-NEG-DECL
    'Pola doesn't help even one person.'

b) *ʔittí ʔiŠaa-nne/-kka*   *pol-i*   *maadd- énn-a*
    one brother.ACC-INDF   Pola-NOM   help-3SG.M-NEG-
                                                    DECL
    'Pola doesn't help even one person.'

20a) *pol-i ʔittí*   *balay-nne/-kka*   *baynnan*
    Pola.NOM one   mistake-INDF   not.exist
    saaf-ee-dd-a
    write-3SG.M-PFV-DECL
    'Pola has written without making even one mistake'

b) *t áán í*   *ʔáyáá-ppe-nne/-kka*   *kaset- áádd é*
    1SG.NOM   what-ABL-INDF   before-CVB
    woos-ai
    pray-1SG.IPFV.DECL
    'I pray before doing anything'

c) *ʔáyá*   *ʔasi-nne/-kka*   *yeekk-ia-wee*
    what   person.NOM- INDF   mourn-RELZ-NMN
    dig- át-eedd á-wa
    prohibite-PASS-RELZ.PFV-TOP
    'It is prohibited to any person to mourn'

d) *ʔáyáá-nne/-kka*   *m-ia-wa*   *ʔess-a*
    what- INDF   eat-RELZ-NMN   stop-2PL.IMP

'Stop eating anything'

C. Types of N-words

Based on the definition given in (1), n-words in Dawurotsuwa will be discussed in this section. They are negative indefinite pronouns, *mule*, and minimizers. They serve as a single negative reply for both positive and negative questions.

1. Negative Indefinite Pronouns

In Dawurotsuwa, negative indefinite pronouns are formed by attaching the morpheme *-nne/-kka* to the content question pronouns and *ʔittí* 'one'. Look at the table below for their formation. It should be noted that Dawurotsuwa indefinite pronouns are not inherently negative because the same form is used for both affirmative and negatives.

TABLE 2
N-WORD FORMATION IN DAWUROTSUWA

No.	Item	Pronouns	Negative Indefinite Pronouns
1	One	*ʔittí* 'one'	*ʔittú-nne, ʔittú-kka*
2	Person	*ʔóón-* 'who/whom'	*ʔóóní-nne, ʔóóní-kka*
3	Thing	*ʔáyáá* 'what'	*ʔáyáy-nne, ʔáyáy-kka*
4	Time	*ʔáídé* 'when'	*ʔáídé-nne, ʔáídé-kka*
5	Place	*hák'á* 'where'	*hák'á-nne, hák'á-kka*
6	Scalar	Proper noun + *-kka*	*Example: Dááná-kka*
9	Conjunction	*-kka….-kka* 'Neither….nor'	*Dááná-kka…..*

As we can see in the table above, each negative indefinite pronoun is suffixed either with *-nne* or *-kka* and forms n-word class together in Dawurotsuwa. It should be noted that it is not the content question pronoun alone or the suffix *-nne* or *-kka* solely form n-words; it is the combination of both that makes up n-words. Dawurotsuwa n-word forming morpheme consists of the element of the standard negation morpheme. The standard negotiation in Dawurotsuwa is made by using the negative operator *-nn-/-kk-* (TABLE-1), consider examples in (21b&22b) below. On the other hand, here we observe that the suffix *-nne/-kka* is used to form indefinite pronouns in Dawurotsuwa. As we can see, both negative morphemes and n-word forming morphemes have *-nn-/-kk-* in common.

21a)   *dáán-í*   *laas'a-a*   m-ee
       Dáána-NOM   lunch-ACC   eat-3SG.M. IPFV.DECL
       'Dana eats lunch'

  b)   *dáán-í*   laas'a-a   m-éé-nn-a
       Dáána-NOM   lunch-ACC   eat-3SG.M-NEG-DECL
       'Dana doesn't eat lunch'

22a)   *ʔánjóór-á*   *laas'a-a*   *m-áu*
       Anjore-NOM   lunch-ACC   eat-3SG.F.IPFV.DECL
       'Anjore eats lunch'

  b)   *ʔánjóór-á*   *laas'a-a*   m-úu-kk-u
       Anjore-NOM   lunch-ACC   eat-3SG-NEG-DECL
       'Anjore doesn't eat lunch'

The morpheme *-nne/-kka* is suffixed to the content question words to from a negative indefinite pronoun in Dawurotsuwa. For instance, in (23), the question word *ʔáyáá* 'what' in (23Q) is suffixed with *-nne/-kka* in (23A) to occur as a negative fragment answer: *ʔáyáá-nne/ʔáyáá-kka*.

23)   Q: *ʔáyáá*   beʔ-áá-dd-íí
             what   see-2SG-PFV-Q
            'What have you seen?'
      A: *ʔáyáá-nne/-kka*
             what-INDF
             'Nothing'

Why are the n-word forming morpheme *-nne/-kka* and negative morpheme *-nn-/-kk-* do they have a common element in Dawurotsuwa? This needs detailed study, though we won't try to answer this question now. Is the n-word morpheme developed from the negative morpheme or vice versa? Of course, there is a certain way that they are connected. I think it will not be an arbitrary as Jespersen states:

The history of negative expressions in various languages makes us witness the following curious fluctuation; the original negative adverb is first weakened, then found insufficient and therefore strengthened, generally through some additional word, and in its turn may be felt like the negative proper and may then in course of time be subject to the same development as the original word (Jespersen, 1917, p.4).

2. Mule

This is the second type of n-word in Dawurotsuwa. This is represented in Dawurotsuwa by *mulokka*, *mule*, *ʔubbakka* as we can see in (24). According to my informant, they prefer *ʔubbakka* to *mulokka*. And they use *mule* without adding *-kka* too. They are categorized under the n-word because they function as a negative reply for both negative and positive questions; they can be used to express negation in a sentence fragment reply, as in (25&26).

24)   *mule, mulokka, ʔubbakka* 'never, not at all'

25)   Q: *Šalu-a*   *laamoti-ssi*   *ʔáídé ʔimm-an íí*
              money-ACC   Lamote-DAT   time give-2SG.IPFV.Q
              'When will you give the money to Laamote?'

        A: *mule/mulo-kka/ʔáídé-kka*
              all/all-INDF /when-INDF
               'Never'

26)   Q: *laamot-a*   *ʔuŠa-a*   *ʔuŠ- áí*
              Laamote-NOM   drink-ACC   smoke-3SG.F.IPFV.Q
              'Does Lamote drink alchool?'

        A: *mule/mulo-kka/ʔáídé-kka*
              all/all- INDF /when- INDF
              'Never'

As negative indefinite pronouns need the sentential negative marker to offer negative interpretation, *mule* also needs sentential negative to convey negative interpretation as in (27a&b). In addition, the place where *mule* is located in a clause doesn't affect its interpretation as in (27b). If there is no sentential negative marker, it doesn't mean the clause is unacceptable. The clause turns positive, as in (28).

27a)   *ʔas-i*   *ʔogi-a*   *ʔer-e-nn-a*   *mule*
        person-NOM   road-ACC   know-3SG.M-NEG-DECL all
        'No one knows the road'

   b)   *mule ʔas-i*   *ʔogi-a*   *ʔer-e-nn-a*
        all   person-NOM   road-ACC know-3SG.M-NEG-DECL
        'No one knows the road'

28)   *ʔas-i*   *ʔogi-a*   *mule ʔer-ee*
        person-NOM   road-ACC   all   know-3SG. IPFV.DECL
        'All persons know the road'

In this language, preceding the verb or appearing at the beginning can't be an excuse to omit the licensing element in the sentence as the absence of the element will make the sentence positive, as in (27-28) above.

In Dawurotsuwa, if *mule* is needed to convey a negative interpretation, there must be a sentential negative marker irrespective of its place where it is located; otherwise, it is changed to positive, as we have discussed above. Giannakidou (2006) categorizes such languages as 'strict negative concord' languages which need the sentential negative marker without overpassing in any place they occur. Dawurotsuwa goes into this strict category.

In negative interpretation, *mule* and *-nne/-kka* phrases share meaning. The difference lies in that the former doesn't carry a meaning of ranking, while the latter also serves in a ranking interpretation, i.e., scalar focus suffix. For example, in (29a) there is a variation in the expected amount of falls in the car, i.e. once, twice, three times, etc. Once is the last one in the ranking. When this ranking is accompanied by a sentential negative marker, it results in a 'not at all' interpretation. On the other hand, the *mule* as in (29b) conveys 'not at all' as well, but it doesn't have a ranking from most to the least, rather it generally expresses, without mentioning specific frequency or order.

29a)   *ta*   *kaam-i*   *ʔittítuu-nne/-kka*   *kund-i*
        SG.POSS car-NOM   once- INDF   fall-CVB
        ʔer-e-nn-a
        know-3SG.M-NEG-DECL
        'My car not fell even once'

   b)   *ta*   *kaam-i*   *mule kund-i*   *ʔer-e-nn-a*
        SG.POSS car-NOM   fall-CVB   know-3SG.M-NEG-DECL
        'My car fell not at all'

Furthermore, both positive and negative questions are replied to using the same form of *mule*. When the question is positive, it is answered with *mulo-kka* as in (30), which gives a negative interpretation. In the negative question also, the same *mulo-kka* is used as a reply as in (31) gives a negative interpretation as well. In both questions, *mulo-kka* conveys a negative meaning.

30)   Q: *n éán í*   *gaammu-a*   *beʔ-á ʔer- áí*
              2SG.NOM   lion-ACC   see-CVB know-2SG.IPFV.Q
              'Have you ever seen a lion?'
        A: *mulo-kka/ʔáídé-kka*

at all- INDF /when- INDF
‘Never’ (i.e., ‘I have never seen a lion’)

31)   Q: *gaammu-a*   *n é́n í*   *beʔ- ́a-b éɬkk-ii*
              lion-ACC   2SG.NOM   see-1SG-PFV-NEG-Q
              ‘Have you not seen a lion?’
       A: *mulo-kka/ʔáídé-kka*
              at all- INDF /when- INDF
              ‘Never’ (i.e., ‘I have never seen a lion’)

On the other hand, in (32) the morpheme *-kka* is used in the positive sentence and conveys the meaning of ‘completely/altogether’. This morpheme has been used to transfer negative interpretation in sentences above (30 &31) for both positive and negative questions. This shows that the contribution of either negative or positive meaning depends on whether there is a sentential negative marker or not.

32)   *pol-i*   *mulo-kka*   *geeŠŠa*
       Pola-NOM   all- INDF   neat
       ‘Pola is completely clean’

The above discussion shows that *mule* functions as negative replies to both negative and positive questions. It also needs a sentential negative marker irrespective of its location of occurrence in order to convey a negative interpretation. When *mule* is used, there is no ranking unlike *-nne/-kka* expressions.

3. Minimizers

Minimizers indicate the smallest amount in the ranked items. This gives them *even*-reading interpretation (Tubau, 2020; Giannakidou & Zeijlstra, 2017). Minimizers consist of implicit *even* expressing elements (Tubau, 2016). Indefinite pronouns in certain languages not only occur in collaboration with sentential negative markers but also occur within positive clauses in the absence of the negative morpheme. They are not limited to the negative context. Questions and if-clauses are one of those contexts in which indefinite pronouns occur in the absence of the sentential negative marker. Indefinite pronouns with such features are termed as ‘negative polarity item’. Under this negative polarity item, expressions that are used for representing the smallest amount are also included (Haspelmath, 1997).

Minimizers in Dawurotsuwa are suffixed with *even* marker *-nne/-kka* explicitly, as in (33). These express the tiniest quantity and when they are accompanied by the sentential negative marker, they represent something/someone that does not exist. For example *ʔ ɨt ɨ́k’aala-nne* ‘lit. one word’ expression of tiniest quantity expression as in (33). The last small thing one can say in a speech is a word; one can’t speak less than a word; sometimes one may say a single letter or single sound.

33)   *ʔitti*   *k’aala-nne/-kka*   *haasay-a-bei-kk-e*
       one   word- INDF   speak-1SG-PFV-NEG-DECL
       ‘I have not spoken a word’

In example (34), *kuŠia wotsa* ‘lit to put hand’ in a scene of beating someone is assumed to be the least incident. If it is less than touching the person beaten, i.e., no contact at all, then one has not been beaten. Touching smoothly with the hand is the first most and least movement in the process of beating. They use this phrase when they want to express they didn’t even touch a person. As we can see in the example below, the negative marker *-kk-* is attached to the verb.

34)   *kuŠia*   *wots- ́a-b éɬkk-e*
       hand   put-1SG-PFV-NEG-DECL
       ‘Lit. I have not put my hand’

In example (35), *c’uccai melee* ‘Lit. Saliva dries’ is used as a reference when to get something done soon. They spit saliva on the floor and order somebody to come back or do something before that saliva dries. If something is done after that saliva dries, then they think it is done late. Hence, saliva is a deadline they give for accomplishing a task.

35)   *c’uccai*   *mel- ́annaa-ni*   *y-a*
       saliva   dry-NEG-CVB   come-IMP
       ‘Lit. Come before saliva dries

In example (36), *sebberee* is related to having money. One can’t have less than this amount of money. It is the last minimum amount of money you can have.

36)   sebberee   baawa
       single penny   not.exist
       ‘Lit. a penny doesn’t exist’

In example (37), *c’ucca haatsi* is used when people want to express a lack of water in a pot. They use this minimum reference: single saliva. For liquid, especially water there can’t exist less than single saliva. The last and minimum amount of water that is assumed to be available is saliva.

37)   *c’ucca*   *haats-i*   *soo-ni*   baawa
       saliva   water-NOM   home-LOC   not.exist
       ‘Lit. saliva water doesn’t exist at home’

In example (38), *kaf ́u* serves for the existence of people or other animals in certain places. For instance, when there is

no one in a field, use a bird as the least minimum entity which can serve as a reference. Then, it is expressed whether the bird is flying or not.

38) *kafú*   *baawa/paal- é-nn-a*
     bird   not.exist/fly-3SG-NEG-DECL
     'Lit. a bird doesn't fly; no one is there'

In example (39), *ʔuduts-ia* expresses the minimum to assume somebody is beaten. In a process of beating a person, the minimum thing that can be done is to remove a fly that is sitting on somebody literally. Beyond this, a lot of things can be done such as kicking, pushing, etc.

39) *ʔuduts-ia*   *laagg-a-kk-a/dents- á-kk-a*
     fly-ACC   drive-2SG-NEG-DECL/remove-2SG-NEG-DECL
     'Lit. you don't take off fly from me'

In the above sentences, minimal unit expressions are *ʔittí k'aala* 'one/single word', *c'ucca* 'saliva', *sebberee* 'a penny', *kafú* 'a bird', *ʔuduts-ia* 'a fly'. When these minimal amounts are used with sentential negative markers, it expresses total absence/lack. These expressions sometimes are suffixed with *-nne/-kka.*

III. FOCUS AND NEGATION

In the previous sections, we discussed how n-words are formed in Dawurotsuwa. We have noticed that these morphemes are functioning differently in different places. In this section, more points that will help to grasp the general pattern of these morphemes will be discussed.

Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions (Krifka, 2007). There are pragmatic and semantic focuses, where the former deals with communicative purposes of the focus, and the latter offers factual information and affects the truth value. The focus evoking semantic elements such as only, also/too, or even can be a cause for change of truth values when the focus varies on the alternatives. When the focus which is placed on alternatives changes, the assertion also changes (Falaus, 2020).

In a similar way, a sentential negation can operate on alternatives. It is assumed that negation is the total exclusiveness of an alternative in the set just like *only*. Both sentential negation and focus are sometimes represented with a similar marker. On the other hand, the scalar element even shows the alternatives are put in order in comparison with others hierarchically. In this case, both negation and *even* are scale-reversing items in which they both are related to one another in this regard (Jackendoff, 1992).

Furthermore, Falaus says, "Some of these focus-sensitive particles also function as coordinating particles and can even introduce negation by themselves in a certain context," (2020, p.11). This phenomenon is prevalent in Dawurotsuwa. Let us consider the following examples:

NO	Marker	Function
1	*-nne*	Coordinating (Non-emphatic)
2	*-kka*	Coordinating (Emphatic)
3	*-kka*	Coordinating (Emphatic negation)
4	*-kka*	Focus particle (even)-scalar
5	*-kka/nne*	Indefinite marker
6	*-kka/nne*	Minimizer
7	*-kk-/-nn-*	Standard negation
8	*-kka*	Additive
9	*-kko*	'some'

This is an interesting occurrence in Dawurotsuwa, where all these functions are represented by the same morpheme with very few differences. Haspelmath (2007) states that the element which is used for marking emphatic negation coordination is at the same time employed to express focus particles. In Dawurotsuwa, emphatic negation coordination *-kka* is used at the same time to mark scalar focus status. Haspelmath (2007) also adds that the markers of indefiniteness are most of the time the same as those of negative focus particles, like not *even* or *neither*, even though they are not the same as the sentential negative marker, unlike Dawurotsuwa, where even they are similar to sentential negation. Watanabe (2004) and Shimoyama (2006) mention that there is a tight relationship in morphology between focus markers and negative polarity items. In Dawurotsuwa (as stated in the table above), the indefiniteness forming morpheme is *-nne/-kka,* which is identical to the focus morpheme *-nne/-kka.*

IV. ETYMOLOGICAL SOURCE OF THE NEGATIVE MARKER

Poletto presents the following elements as sources of sentential negative markers by conducting various reviews:
- Negative auxiliary
- A negative copula
- Marker of focus
- Verbal or adverbial elements originally related to verbs that contain lexical negation
- An adverb originally related to the non-animate negative quantifiers corresponding to 'nothing'

- Elements derived from sentential tags
- Minimizers
- Possessives
- Modality markers (Poletto, 2020, p.137)

In Dawurotsuwa, the sentinel negative marking element has similarities with other functions as we have seen in the table above. What connection do these elements have with each other? Among these elements, the focus marker is the best candidate to assume as the source of the negation marker of Dawurostsuwa.

V. CONCLUSION

This paper investigated n-words in Dawurotsuwa, one of the Omotic languages in Ethiopia. N-words in this language are formed by suffixing the morpheme –*nn/-kka*. The negative indefinite pronouns are constructed by attaching these morphemes to the content question words. Although the name 'negative' is found in the name, it doesn't mean that the morpheme is inherently negative. These morphemes can appear both in the affirmative and negative. The morphemes are not restricted to the n-words in the language; rather they can serve various functions. *Mule* and minimizers are also found in the category of n-words. In addition, the focus marker, indefinite forming morphemes, and sentential negative markers consist of resembling explicit particles. This situation creates good ground to assume the focus marker as a source of the negative marker in the language.

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REFERENCES

[1] Bender, M.L.(Ed). (1976). *The non-Semitic languages of Ethiopia.* Michigan: Michigan State University.
[2] Falaus, A. (2020). Negation and alternatives: Interaction with focus constituents. In V. Déprez & M.T. Espinal (Eds.), *The Oxford handbook of negation* (pp. 333-348). Oxford University Press.
[3] Fleming, H. C. (1976). Omotic overview. In M.L. Bender et al (Eds.), *The non-semitic language of Ethiopia* (pp. 299-323). East Lansing: African Studies Center, Michigan State University.
[4] Giannakidou, A. (2006). N-words and negative concord. In E. Martin and H. van Riemsdijk (Eds.), *The Blackwell companion to syntax* (pp. 327–391). Blackwell Publishings.
[5] Giannakidou, A.& Zeijlstra, H. (2017). The landscape of negative dependencies: Negative concord, N-words. In M. Everaert and H. van Riemsdijk (Eds.), *The Blackwell Companion to Syntax*, 2nd edn. London, Blackwell.
[6] Haspelmath, M. (1997). *Indefinite pronouns.* Oxford University Press.
[7] Haspelmath, M. (2007). Coordination. In T. Shopen (Ed.), *Language typology and syntactic description: Complex constructions* (2nd ed., Vol. II, pp. 1-52). Cambridge: Cambridge University Press.
[8] Jackendoff, R. (1972). *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.
[9] Jespersen, O. (1917). *Negation in English and other languages*. Host (Copenhagen).
[10] KÖhler, B. (2020). Omotic. In R. Vossen & GJ Dimmendaal (Eds.), *The Oxford handbook of African languages* (pp. 331-340). Oxford University Press.
[11] Krifka, Manfred. (2007). Basic notions of information structure. In C. Féry, G. Fanselow, and Manfred Krifka (Eds.), *Interdisciplinary Studies on Information Structure* 6: 1–50.
[12] Laka, I. (1990). *Negation in Syntax: On the Nature of Functional Categories and Projections*. Unpublished doctoral dissertation, MIT.
[13] Poletto, C. (2020). The positioning of negatives. In In R. Vossen & G.J Dimmendaal (Eds.), *The Oxford handbook of African languages* (pp. 135-151). Oxford University Press.
[14] Shimoyama, Junko (2006). Indeterminate phrase quantification in Japanese. *Natural Language Semantics 14*: 139–73.
[15] Tubau, S. (2020). Minimizers and maximizers as different types of polarity items. In V. Déprez & M.T. Espinal (Eds.), *The Oxford handbook of negation* (pp. 407-425). Oxford University Press.
[16] Watanabe, A. (2004). The genesis of negative concord: Syntax and morphology of negative doubling. *LI, 4*, 559–612.

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Assessing of English Morpheme Acquisition Order of Thai Deaf University Students

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Abstract—The purposes of this study were to assess the acquisition order of nine English grammatical morphemes and to identify types of grammatical morphemes which seem difficult for Thai deaf university students. Thirty-seven Thai deaf university students completed 18 fill-in-the-blank questions. Data were analyzed by frequency, percentage, mean, and standard deviation. The results indicated that the English grammatical morpheme acquisition order of Thai deaf university students was as follows: 1) article (Mean (M) =1.38/3.00), 2) plural (M =1.36/3.00), 3) regular past tense (M =1.28/3.00), 4) progressive (M = 1.22/3.00), 5) the 3rd person singular simple present tense (M=1.16/3.00), 6) auxiliary (M = 1.53/3.00), 7) irregular past tense (M = 1.46/3.00), 8) copula (M = 0.41/3.00), and 9) possessive (M = 0.39/3.00). From the results, the 3rd person singular simple present tense, auxiliary, irregular past tense, copula, and possessive were considered difficult for the deaf participants. The findings from this study can be used for further pedagogical and curriculum development in teaching English grammatical morphemes to Thai deaf students.

Index Terms—English morpheme acquisition, grammatical morphemes, Thai deaf university students

I. INTRODUCTION

Mastering the English language takes time and effort. According to Bloom and Lahey (1978), three aspects of English serve as the foundations for language development are phonemes (the sounds which represent linguistic content); morphemes (the units which indicate the meanings and forms of words); and syntax (the structures and order of words of sentences). Figure 1 shows the levels in language development proposed by Bloom & Lahey in 1978. Hearing students usually develop an awareness of these three linguistic features prior to developing semantical knowledge (the meanings of phrases and sentences) and pragmatical knowledge (the actual use of language in specific contexts). In contrast, students with a hearing disability, especially with profound deafness, may lack phonological input and thus phonological knowledge. As a result, students who are profoundly deaf have to heavily rely upon morphemes and syntax. Deaf students typically develop gesture-based communication based primarily on a finite set of signed words with iconicity (Liddell, 1984; Wilbur, 1987). Iconicity refers to the degree of a resemblance between a gestural sign and a word. Since the language learning pathways and communication systems of the deaf are different from their hearing counterparts, the morphological development and knowledge of these two groups of students are also different.
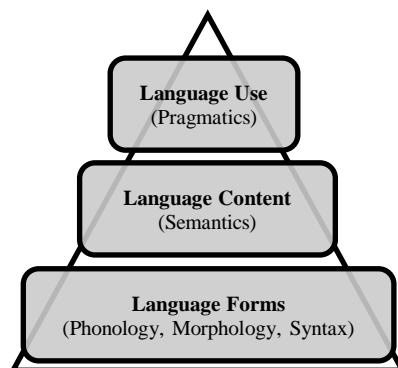

Figure 1. Proposed Levels in Language Development

II. LITERATURE REVIEW

There is a strong association between morphological knowledge and academic performance in English language study (Pratt & Brady, 1988; Powers et al., 1998; Reilly et al., 2009). Morphemes appear widely in printed texts and academic settings in almost all groups of English language students (Deacon & Kirby, 2004). Carlisle and Stone (2005) found that English language is morphophonemic, implying that students need to develop phonological and morphological knowledge as basic elements before acquiring more complicated concepts in English language learning. However, deaf students are likely to lack authentic auditory experience, resulting in a sole dependency on morphemes and other visual cues such as signed gestures, printed texts, and pictures. This usually results in a different, more challenging rate of language development in comparison to hearing students. In addition to the impeded language development of deaf students, the studies in Thailand undertaken in relation to English morphemes and Thai deaf students are very limited. Insightful studies and public awareness of this issue are necessary to develop appropriate curricula and teaching techniques for Thai deaf students.

Morphemes are one of the most fundamental linguistic units for English language students. As a result, researchers started to investigate whether there could be a pattern for English morpheme acquisition among English language students (Berko, 1958; Brown, 1973; Dulay & Burt, 1973, 1974a, 1974b; Larsen-Freeman, 1975, 1976). One of the most well-known proposals of the English morpheme acquisition order is the "Natural Order Hypothesis (NOH)" proposed by Krashen et al. (1975, 1976, 1977, 1978, 1981). Some researchers such as Newkirk et al. (1980), Mayberry and Fischer (1989), and Gaustad et al. (1998, 2000, 2002, 2004) assessed the morphological knowledge of deaf English language students whose first language (L1) was American Sign Language (ASL). These studies offer some mutual insights that both auditory and visual inputs are necessary for morphological knowledge development. When students have hearing problems such as profound deafness, their morphological knowledge is severely affected. As a result, deaf students tend to experience underachievement in English language proficiency (Sterne & Goswami, 2000; Lederberg & Spancer, 2001; Gaustad et al., 2002; Breadmore, 2008).

The number of studies in English morphological development of Thai deaf students is limited. The major points of previous studies in Thai deaf community were mostly in pedagogical principles, special teaching tools, the integration of computer software applications, and exclusive teaching procedures to facilitate in teaching deaf students (Saksiri et al., 2006; Dangsaart et al., 2008; Plaewfueang & Suksakulchai, 2012; Wicha et al., 2012). One study conducted by Subin and Chanyoo (2018) exclusively assessing the morphological development and knowledge of Thai deaf university students. In the study, the authors assessed the students' knowledge of English derivations, inflections, and a combination between roots and affixes by using multiple-choice questions. In conclusion, the students scored very low in all three types of morphemes being assessed. There was a need to further investigate Thai deaf university students' acquisition of English morphemes was highly recommended, leading to more effective English language assessment and development in Thai deaf students.

A. Objectives of the Study

   1. To assess the order of English grammatical morpheme acquisition of Thai deaf university students; and
   2. To identify types of grammatical morphemes that are difficult for Thai deaf university students.

B. Research Questions

   1. What is the order of English grammatical morpheme acquisition for Thai deaf university students?
   2. Which types of grammatical morphemes seem difficult for Thai deaf university students?

C. Theoretical Framework

This study was primarily based on a key concept from Krashen et al.'s NOH in 1977, referring to a predictable sequence of English morpheme acquisition in students studying English as a second language (L2). Nine types of morphemes were grouped into four stages of acquisition in NOH, ranging from morphemes which were acquired early to those that were acquired later. Theoretically, English language students acquire morphemes in stage one before acquiring more morphemes in latter stages. Morphemes within the same stage may be acquired in any order. For example, one student may acquire a knowledge of plural (*-s*) before progressive (*-ing*) and the copula (*be*) while another student may acquire the copula before the other two morphemes of stage one. Although these two students may show a potential variation in morpheme acquisition rate within the same stage, they should acquire all three morphemes in stage one before acquiring morphemes in the next stages. Figure 2 shows a summary of the NOH concept and the morphemes being assessed by Krashen et al. (1977).
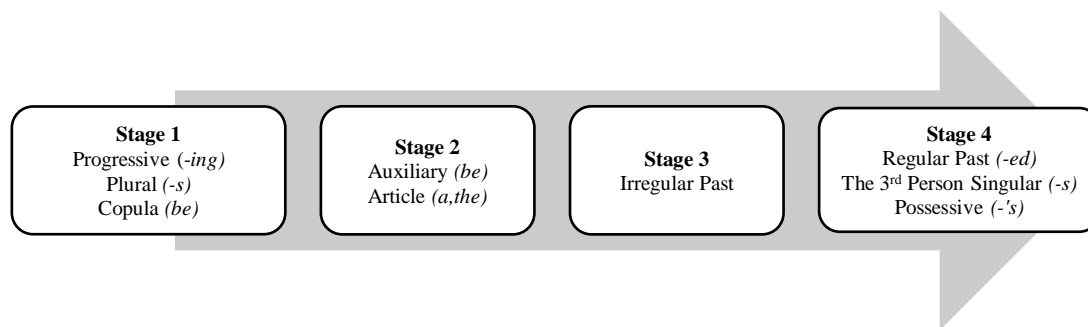
Figure 2. The Order of English Morpheme Acquisition in English as a Second Language

III. METHODOLOGY

A. Research Context and Participants

This study was conducted at *Sunshine University* (a pseudonym for confidentiality) with three major criteria:

1. This university offers academic programs for students with disabilities including deaf students, which satisfies the objectives of the study.

2. The number of deaf students enrolled in the university during the study period was adequate for statistical analysis.

3. At least three mandatory English courses of ASL are taught to deaf students at Sunshine University. This point helped to ensure that deaf students at Sunshine University had been exposed to an ASL background to some extent.

A total of 48 students with profound deafness were enrolled at Sunshine University; thus, that was the population number targeted in this study. As for the initial plan, all profoundly deaf students were expected to be recruited for this study. It was planned that three students would be recruited for a pilot phase and 45 students would be included in a study phase. There were four criteria employed in recruiting participants for this study:

1. All participants were required to enrolled and study at Sunshine University, ensuring exposure to English grammatical morphemes prior to the commencement of the study. Brown (1973) claimed that English language students should acquire a concept of 14 types of morphemes as early as five years old. All of the participants in this study were at least 18 years old prior the study. They should have mastered all types of morphemes by the time the study was conducted.

2. All participants must use Thai Sign Language (TSL) as their L1 and have studied the English language through ASL. All participants had already finished two compulsory English courses before the study commenced.

3. All participants in this study were required to be congenitally profoundly deaf. This condition was set to avoid previous auditory experience, which might interfere with the study. It is noteworthy to state that recruitment procedures were carried out by a professor and teachers of English courses at Sunshine University upon the request of the researchers.

4. No hearing aids were needed or used by the participants.

Initially the researchers planned to recruit all 48 students to take part in this study. Prior to the actual study, three students were randomly asked to participate in the pilot phase. The remaining 45 were expected to participate in the actual study. However, eight students did not show up during the time of actual data collection. Therefore, there were eventually 37 students who took part in the study phase.

B. Research Instrument

The 18 fill-in-the-blank questions related to grammatical morphemes were based on Berko's WUG test (1958). Berko specially designed the WUG test, which contains nonsense words to minimize potential confounding factors such as age of acquisition, difficulty of roots, and complexity of prompts. The researchers in this study asked for permission to use and adapt the original WUG test from Berko via emails, and permission to adapt the test was generously granted by the developer. Regarding the question items, simple sentences and nonsense words were used to assess participants' knowledge of grammatical morphemes. The test was designed and developed to be highly visual and colorful to elicit participants' recollection of English morphemes.

Answers from participants were analyzed by using Dulay and Burt's scoring system (1973) known as the "Bilingual Syntax Measure (BSM)". The BSM scoring system was used in this study because 1) it was based on a notion of grammatical correctness, for those who are non-native English speakers, which was congruent with participants' L1 background in this study; 2) Dulay and Burt suggested that a level around 60-70% of accuracy was adequate to claim morpheme acquisition; and 3) BSM was universally applicable regardless of participants' age differences.

C. Validity and Reliability Assessment

The research instrument and research outline were both submitted to three people who are experts in both the SLA field and in special education for communicative-impaired students to hear their suggestions. In addition, the study outline and all 18 fill-in-the-blank questions adapted from WUG test were approved by the Institutional Review Board

(IRB) committee. The validity of the research instrument and outline achieved an acceptable level of satisfaction. In addition to this validity assessment, the reliability of scoring consistency was also measured through Fleiss's Kappa from four different raters. Six randomized answer sheets from participants in this study were selected and scored by four raters using an answer key offered by the researchers. After a final calculation from Fleiss's Kappa assessment, the overall result of raters' scoring consistency is 1.00 – meaning the test and scoring system used in this study were totally reliable.

D. Data Collection Procedures

1. A research proposal report, an approval document from IRB, and consent letters were submitted to a teacher and sign language interpreters at Sunshine University. The same teacher helped in recruiting the final 37 participants who met four criteria, and the interpreters assisted in communication between the researchers and the participants.

2. Participants were thoroughly informed about the details of the study and were asked to signed consent forms if they were willing to participate in the study.

3. Test procedures were carefully explained to participants. Participants were asked to sit separately from one another to prevent interference from peers. Question sheets containing 18 questions were given to participants on sheets of A4 paper. Each question was explained by the sign language interpreters. Therefore, all participants went through each question at the same time. A maximum of 20 minutes was set to complete all questions.

4. When the time was over, the participants' answer sheets were collected for further data analysis.

IV. RESULTS

A. Results for Research Question One

Research question one asks "What is the order of English grammatical morpheme acquisition for Thai deaf university students?" The answer to this research question was based on the accuracy percentage and mean score (M) according to the BSM scoring system, as follows: 1) article (69.0% accuracy), 2) plural (68.2% accuracy), 3) regular past tense (63.51% accuracy), 4) progressive (60.81% accuracy), 5) the third person singular simple present tense (58.11% accuracy), 6) auxiliary (50.90% accuracy), 7) irregular past tense (48.65% accuracy), 8) copula (40.54% accuracy), and 9) possessive (39.19% accuracy). Table 1 shows a summary of the English grammatical morpheme acquisition order observed in this study.

TABLE 1
RESULTS FOR THE MORPHEME ACQUISITION ORDER OF THAI DEAF UNIVERSITY STUDENTS

Rank	Type of grammatical morpheme	Percentage of accuracy	Mean	Frequency of point on Bilingual Syntax Measure		
				0	0.5	1
1	Article (*a, an*)	69.00	1.38/2.00	10	26	38
2	Plural (*-s*)	68.20	1.36/2.00	6	35	33
3	Regular past tense (*-ed*)	63.51	1.28/2.00	10	34	30
4	Progressive (*-ing*)	60.81	1.22/2.00	13	32	29
5	The 3rd person singular simple present tense (*-s*)	58.11	1.16/2.00	14	33	27
6	Auxiliary (*be*)	50.90	1.53/3.00	29	51	31
7	Irregular past tense	48.65	1.46/3.00	19	76	16
8	Copula (*be*)	40.54	0.41/1.00	12	20	5
9	Possessive (*-'s*)	39.19	0.39/1.00	17	11	9

B. Results for Research Question Two

Research question two was "Which types of grammatical morphemes seem difficult for Thai deaf university students?" According to Dulay and Burt's BSM scoring system (1973), an accuracy level of 60.00% is the minimum criterion to claim morpheme acquisition for non-native English-speaking students. As a result, five types of grammatical morphemes were scored below 60.00%, including the third person singular simple present tense (*-s*) with 58.11% accuracy; auxiliary (*be*) with 50.90%; irregular past tense with 48.65%; Copula (*be*) with 40.54%; and the possessive (*-'s*) with 39.19%. Therefore, these results suggested that the possessive (*-'s*) is considered the most difficult type of grammatical morpheme for Thai deaf university students.

V. DISCUSSION

A. Discussion of the Results from Research Question One

An initial assumption of research question one was that the order of morpheme acquisition in this study should follow Krashen (1977)'s NOH. However, the morpheme acquisition order based on the results of this study actually contradicts the initial assumption. Many potential factors might play a role in the differences between the two orders. For example, the fingerspelling technique, which is considered an effective way for teaching and learning English, is somewhat rarely used in the Thai context (Tumtavitikul & Niwatapant, 2008). Some grammatical morphemes such as

copula, auxiliary, and tense-related morphemes are not present in TSL nor in the Thai language; thus, becoming difficult concepts for Thai deaf students to understand. Overly complicated visual cues (as in '*jed*') might also somewhat confuse participants when compared to simple cues (as in '*lik*'). On the other hand, number-related morphemes (article, plural) were acquired before other types of morphemes. This may be because numbers and their corresponding morphemes are usually taught early on in school. Table 2 shows a comparison between Krashen's NOH and the order in this study.

TABLE 2
A COMPARISON BETWEEN THE KRASHEN'S NOH (1977) AND THE ORDER OF MORPHEME ACQUISITION IN THIS STUDY

Rank	The order of English morpheme acquisition in Krashen's NOH (1977)	Rank	The order of English morpheme acquisition in this study	Percentage of accuracy
Stage 1	copula	1	article	69.00
	plural	2	plural	68.20
	progressive	3	regular past tense	63.51
Stage 2	article	4	progressive	60.81
	auxiliary	5	the 3rd person singular simple present tense	58.11
Stage 3	irregular past tense	6	auxiliary	50.90
Stage 4	possessive	7	irregular past tense	48.65
	the 3rd person singular simple present tense	8	copula	40.54
	regular past tense	9	possessive	39.19

B. Discussion of the Results from Research Question Two

The results show that participants' accuracy percentage for the third person singular simple present tense, auxiliary, irregular past tense, copula, and possessive were lower than the 60.00% threshold of morpheme acquisition (Dulay & Burt, 1973) displaying accuracy percentages of 58.11%, 50.90%, 48.65%, 40.54% and 39.19%, respectively. According to Goldschneider and DeKeyser (2001), there are 5 potential determinants that influence on grammatical morpheme acquisition, including perceptual salience, semantic complexity, morphophonological regularity, syntactic category, and frequency. The authors will then discuss the result by these determinants.

In this study, effects of auditory factors - perceptual salience and morphophonological regularity - could technically be disregarded due to the participants' hearing impairment. Perceptual salience refers to phonetic perception of a language student such as stress level, number of phones in particular morphemes, syllabicity, and sonority level. Morphophonological regularity refers to a relationship between morphemes and their phonological environment, including allomorphy variation and contractibility. Perceptual salience and morphophonological regularity were deemed as significant determinants upon the order of English morpheme acquisition as L2 as mentioned by Ravid (1995) and Peters (1995). Other researchers also highlighted an importance of auditory inputs and oral productions in language acquisition (Dulay & Burt, 1978; Brown, 1973; Cook 1993). However, auditory and oral experiences are not applicable to the participants in this study as they are medically diagnosed as profoundly deaf, resulting in an absence of sound perception and oral language production. These two determinants, therefore, influence on participants difficulties in perceiving abovementioned morphemes.

Semantic complexity influences an acquisition of word meaning. This point is supported by Brown's study (1973), which claimed that semantic complexity –the number of meanings in a particular morphological form – affects the order of morpheme acquisition. That is, the forms which consist of more meanings tend to be acquired later than forms with fewer meaning. Brown gave a specific example of the third person singular simple present tense of a form with multiple semantic elements – the number of a subject (a person), a subject-verb agreement, and tense (time). Compared to plural (*-s*) form, which mainly expresses the number of a subject, the third person singular simple present tense of a form with multiple semantic elements should theoretically be acquired later. This study shows the same result as proposed by Brown (1973). Semantic complexity might also be a reason on late acquisition of auxiliary, irregular past tense, and copula since these morphological forms require knowledge on tense variation and subject-verb agreement, which are more semantically complex than article and plural.

The third point to discuss is the influence of syntactic category. There are multiple ways to group morphemes based on Syntactic theory, or Functional Category theory. Krashen et al. (1975) proposed that morphemes which related to verb phase (VP), such as tense-related morphemes, tend to be acquired later than noun-phase (NP) morphemes, such as article and plural. Likewise, Zobl and Liceras (1994) gave an example of plural morphemes for an early-acquired morphological form. An influence of syntactic category might explain why the participants in this study showed two highest score of accuracy on NP morphemes - article (69.00%) and plural (68.20%) – among other types of morphemes. An early acquisition of NP morphemes might be because Thai deaf students are likely to expose to number-related inputs at very young age in language classes prior than other language aspects such as subject-verb agreement and tenses (Tumtavitikul et al., 2009). However, a conclusive explanation upon an effect of syntactic category and Thai deaf university students' order of English morpheme acquisition is yet to be exclusively proposed.

Another support for difficulty in morpheme acquisition among deaf participants is frequency of exposure. Frequency regards the number of inputs exposed by an individual. It is not unusual that frequently exposed grammatical morphemes are likely to be acquired before those with less exposure frequency. Larsen-Freeman and Long (1991) also supported an influence of input exposure as a significant determinant of morpheme acquisition order. Low-scored morphemes in this study - the third person singular simple present tense, auxiliary, irregular past tense, copula, and possessive – are less likely to be taught nor used by Thai deaf university students. This group of students typically rely on adverbial elements such as time markers due to convenience in hand gestures and nature of sign languages (Liddell, 1984; Wilbur, 1987). For instance, Thai deaf students gesturally emphasize on 'yesterday' in a sentence with a past action rather than manually fingerspelled irregular form of a past-tense verb. Furthermore, concepts about auxiliary and copula are also uncommon for Thai deaf people owing to a nature of TSL. Thai signers are likely to omit auxiliary and copula elements when signing. Although frequency of exposure and use might be possible factors for English morpheme acquisition, exclusive studies on this regard with Thai deaf students are relatively scarce.

In addition, the effect of L1 transference is still debatable among researchers. To some researchers, L1 transference might play a little role in language performance. For instance, Dulay and Burt (1973) claimed that L1 transference only accounted for only 3% of language errors in children. On the other hands, researchers such as Andersen (1977) and Anderson (1978) believed that language transference between L1 and L2 is a significant determinant regarding morpheme acquisition and language accuracy. A more exclusive question arises whether L1 transference between TSL and ASL influences Thai deaf students' morphological knowledge, and to what extent. TSL and ASL share up to 52% of cognates (similarities in linguistic elements) since TSL is a result of creolization among indigenous Thai sign languages and ASL (Woodward, 1996). There is very limited number of studies about L1 transference and English language performance in deaf community in Thailand. It would be insightful to further investigate whether L1 transference really has an impact on Thai deaf students' performance in morphemes and the order of morpheme acquisition.

C. Limitations of the Study

Firstly, this study was carried out as a cross-sectional study due to time constraints. It may not be possible to acquire extensive insights from a cross-sectional study. There are many further factors, such as L1 transference, frequency of using morphemes, and communicative strategies of individuals, which should be further investigated. Secondly, ideally there should have been more participants sourced from different universities, as different universities might have employed different curricula in their English courses. Those differences might affect students' morpheme acquisition (Larsen-Freeman, 1975, 1976). Thirdly, this study would have benefited from using more recent research as reference points. This study was based on studies that were carried out decades ago due to a previous lack of interest in this topic being explored in a Thai context.

VI. CONCLUSION

In conclusion, the learning and acquiring of the English language has proven to be challenging for Thai deaf university students. Although the students were taught about fundamental English morphemes, they still showed difficulty in using grammatically correct morphemes in response to given prompts. Types of morphemes which Thai deaf university students acquired at an acceptable level include article, plural, regular past tense, and progressive tense. In contrast, the third person singular simple tense, auxiliary, irregular past tense, copula, and possessive were considered "difficult to acquire" by the students. There are several potential factors which contribute to the aforementioned results, such as semantic complexity, syntactic category, frequency of inputs and uses of morphemes, and perhaps an effect of language transference. The further insightful investigation of potential factors for language acquisition difficulties, and effective pedagogical interventions, are highly suggested in order to improve the language comprehensibility and intelligibility of deaf students. Any insights derived from future studies could also be beneficial to other groups of people with special needs.

REFERENCES

[1]   Andersen, R.W. (1977). The impoverished state of cross-sectional morpheme acquisition/accuracy methodology (or: The leftovers are more nourishing than the main course). *Working Papers on Bilingualism*, *14*, 47-82
[2]   Anderson, J. I. (1978). An implication model for second language research. *Language Learning*, *28*, 221-282.
[3]   Berko, J. (1958). The child's learning of English morphology. *Word*, *14*(2-3), 150-177.
[4]   Breadmore, H. L. (2008). *Inflectional morphology in the literacy of deaf children* (Doctoral dissertation, University of Birmingham). Retrieved from https://etheses.bham.ac.uk/id/eprint/591/1/BreadmorePhd10.pdf
[5]   Brown, R. (1973). *A first language: The early stages*. Harvard University Press.
[6]   Bloom, L., & Lahey, M. (1978). *Language development and language disorders*. New Jersey, NJ: John Wiley & Sons.
[7]   Carlisle, J. F., & Stone, C. A. (2005). Exploring the role of morphemes in word reading. *Reading Research Quarterly*, *40(4)*, 428-449.
[8]   Cook, V. (1993). *Linguistics and Second Language Acquisition*. New York: St. Martin's Press.
[9]   Critten, S., Connelly, V., Dockrell, J. E., & Walter, K. (2014). Inflectional and derivational morphological spelling abilities of children with specific language impairment. *Frontiers in Psychology*, *5*, 948. http://doi.org/10.3389/fpsyg.2014.00948

[10] Dangsaart, S., Naruedomkul, K., Cercone, N., & Sirinaovakul, B. (2008). Intelligent Thai text–Thai sign translation for language learning. *Computers & Education, 51*(3),1125-1141.

[11] Deacon, S. H., & Kirby, J. R. (2004). Morphological awareness: Just "more phonological"? The roles of morphological and phonological awareness in reading development. *Applied Psycholinguistics*, *25*(2), 223-238.

[12] Dulay, H. C., & Burt, M. K. (1973). Should we teach children syntax? *Language Learning*, 23, 245-258.

[13] Dulay, H. C., & Burt, M. K. (1974a). Errors and strategies in child second language acquisition. *TESOL Quarterly*, 8, 129-136.

[14] Dulay, H. C., & Burt, M. K. (1974b). Natural sequences in child second language acquisition. *Language Learning, 24*, 37-53.

[15] Ehri, L.C., & Robbins, C. (1992). Beginners need some decoding skill to read words by analogy. *Reading Research Quarterly, 27*, 12-26.

[16] Gaustad, M. G. (2000). Morphographic analysis as a word identification strategy for deaf readers. *Journal of Deaf Studies and Deaf Education*, *5*(1)*,* 60–80. https://doi.org/10.1093/deafed/5.1.60

[17] Gaustad, M. G., Kelly, R. R., Payne, J. A., & Lylak, E. (2002). Deaf and hearing students' morphological knowledge applied to printed English. *American Annals of the Deaf*, *147*(5)*,* 5-21. https://doi:10.1353/aad.2012.0264.

[18] Gaustad, M. G., & Kelly, R. R. (2004). The relationship between reading achievement and morphological word analysis in deaf and hearing students matched for reading level. *Journal of Deaf Studies and Deaf Education*, *9*(3), 269-285. https://doi:10.1093/deafed/enh030

[19] Goldscheider, J.M., & Dekeyser, R.M. (2001). Explaining the "Natural Order of L2 Morpheme Acquisition" in English: A meta-analysis of multiple determinants. *Language Learning*, *51*(1), 1-50.

[20] Krashen, S. D. (1981). *Second language acquisition and second language learning*. Oxford, England: Pergamon.

[21] Krashen, S. D., Houck, N., Giunchi, P., Bode, S., Birnbaum, R., & Strei, G. (1977). Difficulty order for grammatical morphemes for adult second language performers using free speech. *TESOL Quarterly*, *11*, 335-341. https://doi.org/10.2307/3586032

[22] Krashen, S. D., Madden, C., & Bailey, N. (1975). Theoretical aspects of grammatical sequencing. *On TESOL '75: New directions in second language learning, teaching and bilingual education* (pp. 44-54). Washington, DC: TESOL.

[23] Krashen, S. D., & Scarcella, R. (1978). *Issues in second language research*. Rowley, MA: Newbury House Publishers.

[24] Krashen, S. D., Sferlazza, V., Feldman, L., & Fathman, A. K. (1976). Adult performance on the SLOPE test: More evidence for a natural sequence in adult second language acquisition. *Language Learning*, *26*, 145-151.

[25] Larsen-Freeman, D. E. (1975). The acquisition of grammatical morphemes by adult ESL students. *TESOL Quarterly*, 9, 409-419.

[26] Larsen-Freeman, D. E. (1976). An explanation for the morpheme acquisition order of second language students. *Language Learning*, *26*, 125-134.

[27] Larsen-Freeman, D. E., & Long, M. H. (1991). *An introduction to second language acquisition research*. New York: Longman.

[28] Lederberg, A. R., & Spencer, P. E. (2001). Vocabulary development of young deaf and hard of hearing children. *Context, Cognition, and Deafness* (pp. 73-92. Washington DC: Gallaudet University Press

[29] Liddell, S. K. (1984). Think and believe: sequentiality in American Sign Language. *Language*, 60 (2), 372-399. https://doi.org/10.2307/413645

[30] Lucas, C. (Ed.). (1990). *Sign language research: Theoretical issues*. Washington, USA: Gallaudet University Press.

[31] Mayberry, R. I., & Fischer, S. D. (1989). Looking through phonological shape to lexical meaning: The bottleneck of non-native sign language processing. *Memory & Cognition*, *17*(6), 740-754.

[32] Nagy, W., Herman, P., & Anderson, R. (1985). Learning words from context. *Reading Research Quarterly*, *20*, 233–253.

[33] Newkirk, D., Klima, E. S., Pedersen, C. C., & Bellugi, U. (1980). Linguistic evidence from slips of the hand. In V. Fromkin (Ed.), *Errors in linguistic performance: Slips of the tongue, ear, pen, and hand* (pp. 165-197). New York: Academic Press.

[34] Perfetti, C.A. (1992). The representation problem in reading acquisition. In P. Gough, L. Ehri, & R. Treiman (Eds.), *Reading acquisition* (pp. 107–143). Hillsdale, NJ: Erlbaum.

[35] Peters, A.M. (1995). Strategies in the acquisition of syntax. In P. Fletcher and B. MacWhinney (Eds.), *The handbook of child language* (pp. 462-482)*.* Oxford, England: Blackwell.

[36] Plaewfueang, K., & Suksakulchai, S. (2012). A Framework for Promoting Reading Skills for Hearing-Impaired Persons Using the Sign Language Picture Story. In *Proceedings of the World Congress on Engineering and Computer Science*, *1*, Retrieved from http://www.iaeng.org/publication/WCECS2012/WCECS2012_pp261-264.pdf

[37] Powers, S., Gregory, S., & Thoutenhoofd, E. D. (1998). *The Educational Achievements of Deaf Children*. (Rep. No. DfEE Research Report RR65). London: Department for Education and Employment

[38] Pratt, A. C., & Brady, S. (1988). Relation of phonological awareness to reading disability in children and adults. *Journal of Educational Psychology, 80(3)*, 319-323.

[39] Ravid, D.D. (1995). *Language change in children and adult Hebrew*. New York: Oxford University Press.

[40] Reilly, S., Bavin, E. L., Bretherton, L., Conway, L., Eadie, P., Cini, E., ... & Wake, M. (2009). The Early Language in Victoria Study (ELVS): A prospective, longitudinal study of communication skills and expressive vocabulary development at 8, 12 and 24 months. *International Journal of Speech-Language Pathology*, *11*(5), 344-357. https://doi.org/10.1080/17549500903147560

[41] Saksiri, B., Ferrell, W. G., & Ruenwongsa, P. (2006). Virtual sign animated pedagogic agents to support computer education for deaf students. *ACM SIGACCESS Accessibility and Computing*, *86*, 40-44.

[42] Sterne, A., & Goswami, U. (2000). Phonological awareness of syllables, rhymes, and phonemes in deaf children. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, *41*(5), 609-625.

[43] Subin., N. & Chanyoo., N. (2018). A preliminary study on morphological development in English language of Thai deaf university students. In *Proceedings of The 2ⁿᵈ National Conference on Humanities and Social Science: Learning Diversity for Quality of Life,* 69-92. Nakhon Pathom, Thailand: Mahidol University.

[44] Tumtavitikul, A., Niwatapant, C., & Dill, P. (2009). Classifiers in Thai Sign Language. *SKASE Journal of Theoretical Linguistics*, *6(1)*, 27-44.

[45] Wicha, S., Sharp, B., Sureephong, P., Chakpitak, N., & Atkins, A. (2012). An animated dictionary for hearing-impaired students in Thailand. *Journal of Research in Special Educational Needs, 12(4)*, 234-244.

[46] Wilbur, R. B. (1987). *American Sign Language: linguistic and applied dimensions*. Washington, USA: Little, Brown and Co.

[47] Woodward, J. (1996). Modern Standard Thai Sign Language, influence from ASL, and its relationship to original Thai sign varieties. *Sign Language Studies*, *92*, 227-252.

[48] Zobl, H. & Liceras, J. (1994). Functional categories and acquisition orders. *Language Learning*, *44*, 159-180.

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Letting the Struggling Saudi EFL Readers Take Lead: How Teachers Transform English Language Instruction

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Abstract—**The paper intends to divulge and argue the major reading problems Saudi students face and flaws in contemporary research that affects a lot on developing their reading skills. The problems and pitfalls related to reading skill, prime facie, seem traditional but widely discussed; hitherto, remain unsettled in the arena of language learning. The researcher tries to explore and shed light on these problems while achieving different asymptotic levels of performance, constrained and unconstrained skills to observe and experience how far and fast the Saudi EFL learners master the reading skills in and out of classroom settings at Jazan University. It is solely based on experience and observational data that the researcher has collected on his students' everyday classroom performance. The paper also monitors how far the previous findings contributed to overcome struggling readers' problems and improve their reading abilities and suggests how recognizing these major occurring problems may endow with an authentic and viable initiative for planning reading instruction and interventions. Hence, the present study aims to provide in-depth examination and interpretation of struggling Saudi EFL learners' problems and challenges meting out different texts in structure and related aspects on different reading tasks. The paper concludes with some vital suggestions that would indubitably help learners and teachers practice in realia to lessen anxiety, achieve desired outcomes and evolve educational policies for language instruction, evaluation and assessment.**

Index Terms—**motivation, reading difficulties, Saudi EFL learners, struggling readers, vocabulary**

I. INTRODUCTION

The research has given all of us an incredible chance to have an impact on the academic world. Currently, there are many institutions, forums, and initiatives that are working to expand access to research higher education. With such high partaking, we hope it is only a matter of time before the benefits of worldwide research are truly realized. It's very difficult to dispel that global research acknowledges it as an EFL learning paradigm.

The EFL learners in Saudi Arabia face many problems in the process of language learning but 'learning to read' is the one where they are stuck the most. The teachers also discuss at length to take remedial actions consequently strive to faster develop the reading skill, better their language learning and academic achievement. The recommendations of various studies also read and found not appropriate and congenial to the learners. The learners have different problems depending upon their first language, culture, and region. The new syllabi, technology, course objectives, limited time, social and parental expectations, and academic pressure are a few that hinder the development of reading skills. Therefore, the contemporary research on reading skills is not sufficient to overcome all flaws and pitfalls the learners face today, but it needs special attention that makes this research toil at the grassroots. The study pulls out its scope by getting into the findings of major contemporary studies on developing reading skills in context to EFL learners, which is discussed in the succeeding heading.

The notion of developing reading skills amongst EFL learners at the same pace also misleads the teachers and affects the stipulated milestones. We must acknowledge the fact that transformation from a beginner-mid-average to be a confident and fluent reader needs consistent and headstrong learning. Each learner has to travel through a long journey to attain pre-literacy skills, knowledge of phonological and phonemic awareness, fluency, cultural factors, simple and short to long and complex comprehension texts to attain advanced vocabulary and fast reading; consequently, uplifting and facilitating the learner to boost empathy and motivation, read and comprehend long texts correctly, solve problems, review, timely completion of homework and achieves the desired learning outcomes efficiently and effectively.

The purpose of the article is to make teachers and learners aware of struggling readers' problems they face in reading texts and then suggest remedial actions that the teachers may incorporate in differentiating classroom instruction and future planning and assessment. Herein, we take up problems of EFL learners that are mainly experiential in nature and not learners with dyslexia or any other disabilities.

II. PURPOSE OF STUDY

The contemporary research on reading skills is not sufficient to overcome all flaws and pitfalls the learners face

today, but it needs special attention that makes this research toil at the grassroots. The study pulls out its scope by getting into the findings of major contemporary studies on developing reading skills in context to EFL learners, which is discussed in the succeeding heading.

Literature Review

Reading difficulties vary from person to person, language to language, and from generation to generation. An array of research and explanations has been proposed for different readers' difficulties, as part of a growing literature on reading skills in language learning. Reading skill indubitably has its own vivacity in language acquisition and is considered one of the most important communication skills as it can improve the overall language proficiency (Snow et al., 1998; Krashen & Brown, 2007; Sharma, 2018). Rivers (1981) named it not only the most important activity, a source of information, a pleasurable activity, but also as a means of consolidating and extending one's knowledge of the language. Goodman (1973) declares reading as a learner's interaction with a message encoded by the writer, directing his total prior experience and concepts he attained, as well as the language competence he has achieved. Hoover and Gough (1990) mention reading as the ability to take lexical information (i.e. semantic information at the word level) and derive the sentence and discourse interpretation. Ehri (1991) described four different ways to read words; decoding, reading by analogy, reading by the prediction made from context, and sight word reading.

The aforementioned and the ensuing studies have dealt with the reading difficulties encompassing through varied angles and the findings indeed contributed to bringing comfort to the struggling readers. The researcher doesn't question the efficacy of researchers that dealt with these reading problems and assessment; nevertheless, observed that even the name "reader's problems" is a misnomer.

The results of studies carried out on EFL learners focused on numerous problems the readers repeatedly face. The learning pace and process information vary among learners because of many differences: personal, cognitive, cultural, socioeconomic, linguistic competence, etc. Reading doesn't confine readers to syntax and semantics but a cognitive application to text that integrates across a range of sources of information, from lexical features to knowledge concerning events in the world, and reading comprehension in 'balanced literacy' results from developing skills in the areas of decoding and linguistic comprehension (Kirby & Savage, 2008).

Alsamadani (2008) illustrated that lagging behind is a cognitive difficulty associated with the process of reading in another language. Qrqez and Rashid (2017) mentioned ambiguous words, unfamiliar vocabulary, accuracy, speed, and limited available time to cognitively process the text. Raihan and Nezami (2012) stated problems related to spelling and pronunciation, and Rahman and Alhaisoni (2013) found students' poor proficiency and lack of good learning materials. Elwer (2014) ascertains much instability in compromised oral language skills, such as vocabulary, grammar, and verbal memory across all test occasions. Rajab and Al-Sadi (2015) identified lack of interest and lack of motivation towards 'academic reading' as the major problems in reading texts. The other studies found that poor readers might spend less time reading, therefore, develop limited vocabulary and general knowledge (Yunus et al., 2016; Ismail & Yusof, 2016). Since researchers do differ about the frequency and occurrence of reading difficulties. Quite a few studies consider decoding and linguistic comprehension to represent more than 70% of the variance in reading comprehension (Catts et al., 2005).

After the in-depth analysis of these studies that underscore the reading difficulties among the struggling readers, the researcher feels much left to explore struggling EFL learners that would ostensibly suggest new ideas and notions and further open new boulevards concourse to aspiring researchers to move beyond the context and languages. Ensuing paragraphs will enlighten on the research methodology, major reading difficulties coupled with the observations and outcomes.

III. RESEARCH METHODOLOGY

The research follows an observatory and experiential approach to investigate and analyze the major difficulties and challenges that Saudi EFL learners face in formal settings. Anecdotal evidence shows that the quantitative methods and numeral methodologies may lessen the scope merely to numerical measures and neglect oblique, major revelations, essential explanations, and clarifications. The researcher who taught observed, and experienced in classroom settings, considered as a research tool to gather observations from over 150 students in their first academic year studying at Jazan University during the last three academic years. The major mistakes committed by the student participants during reading texts in the classroom were identified, their responses to the reading comprehension questions were analyzed and monitored regularly and their reading skills were evaluated throughout the process and in the formative assessment.

IV. DATA ANALYSIS AND MAJOR FINDINGS ON STRUGGLING READERS' DIFFICULTIES AND CHALLENGES

Reading is an indispensable skill that has a huge impact on one's personality and performance as a whole. It is an interactive process consisting of inferring, knowing correct sounds and comprehension (Kamhi & Catts, 2008). The reader should get ample opportunities to learn, develop and excel in their reading skills which are likely to attend and address their critical problems that crop up constantly in the reading process. A few variables such as reading attitude, reading purpose, prior knowledge about the text, textual structure, and vocabulary knowledge contribute to success; comprehension is determined by the interaction of the reader with the text (Yıldırım, 2010).

The constrained skills include print awareness, phonemic awareness, alphabetic knowledge, spelling, and fluency which are supposed to be mastered the most at the school level. The aim of classroom instruction is to attain an understanding of these skills so as to overcome anxiety, apprehensions, and fear to get complete control of texts. Unconstrained skills are the long-term and life skills that are mainly developed at the tertiary level and consist of verbal language, lexis, comprehension, analysis, compose and developing critical thinking. The researcher makes a seminal attempt to take a holistic overview of the inter-related factors which constitute reading comprehension challenges in their totality. There is no comprehensive observatory and experiential study that determines and analyzes difficulties Saudi students face in realia to master constrained and unconstrained skills. Therefore, let's dive deeper to discover and illuminate the major problems the struggling EFL learners face.

A. Decoding of Words

Decoding is an interactive and complex process for readers in every language and is evenly vital in reading, understanding and exploring valuable ideas in English texts. It becomes more essential to extract meaning from comprehension texts across academic disciplines. Hammerberg (2004) states that the construction of meaning consists of more than the reader merely decoding words and saying them aloud in his/her head. Rather, it is an interactive process, which involves the instant and active construction of meaning while reading.

The students while reading texts encounter unfamiliar and out-of-context words made them difficult in sounding out words, not able to put sounds to letters to sound out the text language. Most students struggled when they met unfamiliar words. Proper and timely phonics instruction, guidance, motivation, and continual practice with reading different texts loud eventually improved immensely making students get rid of shyness and hesitation to be confident, think critically and improve comprehension ability. Klingner et al. (2007) opine when the learner reads words correctly, s/he must be able to go beyond the text's literal meaning in order to appreciate the author's intent and think critically about deeper layers of meaning.

B. Prior Knowledge

The students have Arabic as their first language and obviously dominant amongst students' interactions in class. They have implausible strength and incredible potential to learn but lack pre-literacy skills. This affects not only their performance in the curriculum but also has an adverse impact on their curiosity to learn and use English. The researcher earlier in his article (2019) observed that a few students have problems with literacy skills, which affect their learning in the new curriculum and demotivate them to learn English. Moreover, the students have multiple intelligences and different learning styles, also struggle in reading and writing respectively. Some students are slow learners and do not have pre-literacy skills. The students have less knowledge of fundamentals, importance, and acceptance of the English language globally consequently struggle with many reading problems in the class. Kintsch (2013) stated that for a student with low prior knowledge or experience about the topic of the text he is reading, his reading comprehension, as a result, will be poor (Kintsch, 2013). And the students studied English subjects in school just to pass, and a few factors lack practice in class, the limited time allocated to learning English at school also stalled their language learning (Alzahrani, 2009). The researcher builds up students' foundation of the English language to develop their basic reading skills, igniting the spark to activate their prior knowledge correlating with the prepared pre-reading exercises and also given in the textbook to enhance their text comprehensively.

C. Inadequate Lexical Knowledge

Strong reading skills constitute adequate lexical knowledge to better comprehend the given texts across expertise. Ample lexical knowledge makes decoding and reading easy, speedy to critically analyze and evaluate the unseen texts. The students expand their vocabulary through regular reading that in turn develop and widen up knowledge about world occurrences. It is through reading that students expand their vocabulary and then put it into practice in writing to develop ideas and perceptions about the real world and then excel in other communication skills as well (Sharma, 2019). Most of the students had fewer words in their fold causing poor comprehension, obstruct growth, and being bit-hesitant to share their reading difficulties. On the other hand, students with good vocabulary had taken less time and shown a better ability to read and understand texts. We taught them the significance of word-knowledge-power, provided lexicon prior to reading, and its importance incorporating and correlating with reading comprehension that helps in decoding and interpreting words correctly. Grabe and Stoller (2011) also affirmed that the most fundamental requirement for fluent reading comprehension is rapid and automatic word recognition or lexical access – the calling up of the meaning of a word as it is recognized.

D. Reading Techniques

Students having a gamut of learning strategies excel much faster than students without strategies. The learners use or scaffold them as per their choice, interest, time, and convenience to get the maximum knowledge and understanding. These strategies help them to ignite their prior knowledge to infer the main idea or contextual guess, enhance lexical knowledge, and motivate them to improve their literacy skills. Teachers, on the other hand, may use effective techniques that include: modify their teaching skills; preparing relevant study material, identifying the problematic texts, struggling readers and their reading difficulties, phonological knowledge, reading aloud, scaffolding, motivational

techniques, and clear and systematic instructions. Duke and Pearson (2002) mentioned that poor teaching skills and teacher training programs, reading books of their own choosing, listening to the teacher read aloud to the class, scaffolding, systematic vocabulary instruction, and reading aloud are among the most effective techniques.

E. Reading Fluency and Accuracy

The readers have to be fluent enough to read with correct pronunciation to enable themselves and listeners to comprehend the read-out text completely and correctly. Reading text has always been a cognitively challenging task because it needs concentration and promptness to process, connect with the prior knowledge to store vital information in the mind. Many students who were less fluent struggled in reading texts because of limited word knowledge and poor decoding ability. The teacher supported the students with systematic instruction on extensive reading, giving students ample time to practice and complete reading tasks. While monitoring these two, we didn't expect and considered speedy reading but evaluated how much one has comprehended the text. The authentic reading texts from the assigned book have many difficult and unfamiliar words and only a few students could infer and guess the given text with the given clues and pre-reading activities. However, the students gained momentum in reading texts regularly enabling them to recognize more words effortlessly upward their fluency, proficiency, and accuracy of the reading text. Although the Saudi educational system has included the teaching of English for a very long time, students' proficiency in English in general and in reading in particular, is far from satisfactory (Al-Karroud, 2005; Al-Qahtani, 2010; Al-Roomy, 2013).

F. Arabic vis-à-vis English

Both languages have vast social, cultural, linguistic, and pragmatic differences. Students have sound knowledge of the Arabic language and are perceived with canards and misconception about the learning of the English language that it's very complex and challenging. English is entirely new to EFL learners because of different rules to L1 (Arabic), writing pattern (opposite in both), and the difference in pronouncing English words (silent words) and writing the same differently in English whereas Arabic has similar forms in both reading and writing respectively. Mourtaga (2004) stated that for Arabic speakers, learning to read English is associated with a variety of challenges and difficulties including poor vocabulary, grammar, and syntax which need to be explored in order for them to be taught and these problems overcome. The teacher gave an explanation of learners' preconceived pessimistic conception of the English language and taught the differences in both languages (L1 & L2) in the beginning, and also demonstrated in the course of reading texts. The researcher in his previous article (2015) found few English consonants as problematic ones for Arabic speakers that make students commit several errors while reading, speaking, or writing in English because of the great influence of their mother tongue. The students could succeed in processing information faster and constructing meaning in reading texts on the basis of their real-life experiences.

G. Phonetics and English Spelling

The English language has many silent letters and unexpected sounds and the students often get astonished to experience this. Students struggle to draw sounds to alphabets and sound out words in reading texts. They faced difficulties in pronouncing letters and words then decoding, poor understanding of words (phoneme, syllables, stress words, silent letters, and different sounds, etc.), sentences to the text reading. This reading created chaos, disappointment, frustration in students' minds. Therefore, the teacher had to create phonemic awareness that covered various features of phonetics to articulate the words correctly. It took time to convince and motivate students by altering teaching strategies to more student-friendly, planned lessons, and activities using technology connected to their level and real-life experiences. These eventually facilitated students to feel confident and reading less challenging. All students had smartphones with different applications on language learning used them whenever and wherever which surprisingly and unexpectedly enhanced their reading and literacy skills considerably.

H. Quizzes and Exam Phobia

The main cause of struggling students in reading is to take up formative and assessment exams. Students feel insecure and focus more on scoring marks rather than strive to improve their reading skills. Mustafa (2002) stated that much of the teaching inside the classroom is test-driven instruction that is generally geared towards passing the final exams. All the courses have their standard schedule to criteria to assess students and the teachers have to abide by the instructions. Similarly, the researcher herein followed the given schedule but was flexible in conducting formal exams but monitored strictly that often led to change teaching strategy, study materials, and activities (pre-reading, while reading, and post-reading) prepared for the students within the purview of the University curriculum. The texts were selected from the main course-book for the activities developed for the students to read, participate and observe. Pre-reading activities were very useful to activate prior knowledge, to read, comprehend and anticipate pictures given in the text, together led to yearning to learn, and prompt to ask questions about the text. While-reading activities assisted the teacher to read and discuss in pairs, forming new ideas relating their real-life experiences with the pictures and contents given in the text. Post-reading activities helped to know how far the previous reading facilitated them to think, feel, understand, analyze and summarize the main points on the text. The students displayed encouraging performance not only with the planned, organized, and flexible approach from the teacher but also unconditional and constructive support from the course-administration.

I. Lack of Interest and Motivation

Saudi students often feel in odd situations when they come across reading text that is unfamiliar and new to them. They expect the texts to be related to their previous knowledge, directly relate to their personal interest and subject. They get less time given to EFL reading because of more emphasis on the core subjects, fixed credit hours, and time constraints. As a result, the students lose interest and are demotivated to read the texts. Hidi and Renniger (2006) claim that personal interest originates from an intrinsic desire to understand particular topics. However, the researcher observed that the planned and organized contents of the course curriculum (consisting of many activities) with sound teaching strategies gradually create interest and motivate students. The activities that make acquaintances between the reading texts and learners' personal experience always help increase in reading. Motivation (intrinsic and extrinsic) is the key ingredient to develop reading, and motivated readers interact and participate more in analyzing, discussing, and summarizing the texts. Anecdotal evidence found this concept a huge upshot on learning any language (Brown, 2007; Hedgcock & Ferris, 2009).

J. Lack of Reading Habit

The most vulnerable aspect affecting readers' success is inconsistency or no reading habit. The students didn't inculcate reading habits at the school level and home and also no one inspired and motivated them either. The researcher was surprised over students' revelations that they hardly read any book or newspaper at home and were never told about the importance of reading. However, some students have positive opinions and approaches for reading they are motivated by the teachers, elders, and friends. The researcher exploited students' interest in smartphones establishing groups on social media for reading purposes. It led them to share, participate and read messages, quotes, and short paragraphs that enable them to use at their convenience. The students learned how to preview, skim, scan, infer, and guess new, unseen and unfamiliar words using cues while reading the text. The researcher in an article (2019) on social media argued that it has a great pedagogical potential for improving language awareness, grammar, vocabulary, and fluency; thus, the course designers must step forward to develop curricula and programs to keep abreast with the new technological advancements to increase instructional effectiveness and learners' efficiency. The integrated skills i.e. reading and writing given in the course-book also facilitated students to read more attentively. It is tedious, long, and consistent monitoring and mentoring, but gives satisfaction as students display confidence and interest in reading texts.

K. Lack of Reading Environment

This is the least attentive area to develop reading but contributes the most resulting in students being hesitant, shy, anxious, and worrisome in reading context. Every student needs a conducive environment to succeed in the subject s/he wants. In reading, the readers gain their comfort, relaxation, and eagerness to read and comprehend the desired texts. Teachers, administration, parents, elders, and friends may create a healthy environment that may help readers keep away stress, strain, anxiety, passivism they encounter while reading. Teachers may motivate, guide, and support in the classroom; parents may inspire and encourage at home; administration may support providing the trained teachers, time, enhanced reading programs, reading room, and library. Without the aforementioned means, students cannot get the help needed to resolve their problems and they experience adaptation problems in their classes (Bender, 2012). Timely support, encouragement, activities planned and empathy have shown substantial improvements in developing students' reading skills. The struggling readers started to interact, discuss and participate in peer/group activities with the sound and peaceful conditions eventually effective performance at par with motivated students. This is already proven in several studies (Lyon et al., 2003; Sharma, 2018).

L. Lack of Support and Guidance

The EFL readers have misconceptions about the English subject; therefore, they study this subject just to pass the school exam. This creates a lack of interest in them towards reading English texts. Even if they start, they struggle to read and lose interest. Then, the onus lies on teachers and parents to direct them in the right spirit of reading; create positive conditions ignoring and forgetting previous mistakes; work shoulder-to-shoulder with students; create a homely and healthy environment both in the classroom and at home; appreciate and acknowledge their strengths and work on their weaknesses; preparing study material with a number of activities matching students' interests on the given curriculum, and making students at ease and pleasure. Paananen et al. (2009) confirmed that the home environment can affect students' reading ability either positively or negatively. Parents should monitor their children and follow up with their homework studies as a daily routine. The researcher could contribute maximum on his part but couldn't get the desired outcomes on the other part because of several personal and cultural reasons. But students, who got support and guidance at both ends, had performed exceptionally well. They became confident, no fear, picked up pace in fluency in reading and comprehending the given texts. Their performance indubitably not only set precedence for the peers and successors but also showed a ray of hope for the teachers as well. This is established by the research on how effective is the cooperation of the teacher and family on improving the struggling readers' performance in reading texts (Torgesen, 2000; Westwood, 2008).

M. Teachers' Perception and Professional Development

Students do perceive with varied notions about teachers' skills. English textbooks prima facie seem novice and unfamiliar topics with difficult content but selected books with a vision to acquire new knowledge to accomplish the desired outcomes. Al-Hazmi (2003) endorses that Saudi EFL teachers are not highly qualified and lack proper training to implement effective teaching methods' however, the researcher strongly opines that Saudi EFL college teachers have sound and depth knowledge of the subject and gained adequate experience studying in native countries like UK, USA, Australia, New Zealand, etc. It's noteworthy to mention that teaching methodology, teaching experience, subject knowledge, and classroom environment are vital ingredients to teaching and learning any language because they altogether help students give free space, ample opportunities, willingness, and encouragement to develop their communication skills. Good teachers always show empathy and assist students with study material, suggesting good reading strategies, building lexical knowledge, classroom support, use of technology in instructions, good assessment and evaluation of students' products, and constructive and prompt feedback. They do make their students attain the desired speed, fluency, accuracy that further instigate them to read and comprehend the text critically, analyze, infer, guess and construct meaning from clues in the text. The authorities are dynamic, compassionate, and tread high to update and upgrade teachers with the latest developments on courses, textbooks, technology and so forth conducting workshops regularly.

V. Conclusion and Recommendations

This study illustrates how EFL teachers are able to identify reading difficulties, capture individual attention, progress trajectory, encourage and motivate struggling readers by timely addressing their reading difficulties by transforming their teaching instructions. Getting expertise in reading skills is the sum of small efforts repeated day-in and day-out. The researcher concludes that inculcating a habit of reading books, articles, and news of one's interest is like taking a journey to your favorite destination. One should focus on the goals, self-belief, keeping patience, and practicing each day will lessen reading difficulties and shorten the path to gain momentum and finally achieve excellence in reading skills. We must convince our learners that the grades and marks scored are temporary but the knowledge gained through consistent hard work is permanent. Soon most of the struggling readers would get rid of reading difficulties; subsequently, it will help them transform their struggles into strengths. The potential for continued research in the domain seems nonstop. Each question once answered masquerades another challenge. Similarly, one boulevard and gamut in language learning examined and explored to get solution open gateways to the researchers to again question its reliability and validity, ignite a spark to undertake another genre eventually transform students' techniques, behavior, and learning.

The dissection of the observation and assessment results herein have inevitably focused on struggling readers' success by overcoming the effects of the new curriculum, misconceptions about EFL learning and all apprehensions, difficulties, and challenges have arisen on the part of students, teachers, parents, environment, culture, language, and administration. The outcomes of the study overall align with other studies; students' reading habits in both Arabic and English (Jraissati, 2010; Bendriss & Golkowska, 2011; Al-Yacoub, 2012; Kechichian, 2012); lack of reading (Rajab & Al-Sadi, 2015; Al-Mansour & Al-Shorman, 2011). The students made the best use of technology and used social media applications and language apps in smartphones to participate in group reading activities and solve problems to utilize the time they are habitual of wasting on social media. Sharma (2019) asserts that Saudi students have a first-class perspective on social media (SM) usage and its usage have shown remarkable development and advancement in Saudi students' language learning in and beyond the classroom. Social media usage augments reading practices, creates constructive opinions about reading, enhances classroom participation, and further develops cognitive abilities, cultural, linguistic and global awareness, and critical thinking skills. The students are now basking in the reflected glory of the knowledge group.

The researcher advised students to read regularly to get more knowledge, wisdom, and awareness of the subject and world affairs in order to improve their personality. The reading coupled with technology also facilitates students to improve their reading productivity by tracking time. They can organize their reading activities, set their priorities, track the time spend on them and get insights about how they use their time judiciously by viewing innate data/statistics through online applications. This would help create niches in the realm of their expertise. The researcher affirms that the Saudi students have embedded themselves as the important cogs in the EFL wheel. Most of the struggling readers often grab their opportunities with both hands. They feel that reading develops vocabulary, invokes deeper interest, cognitive ability to comprehend, increases concentration, attention duration, and props up deep improved diagnostic and analytical thinking. The reading problems together might take a toll on their minds; although, they prefer to make it simple and easy with conscious efforts, courage, conviction, and determination. The students overcoming these reading difficulties indubitably fill the empty void with timely guidance, encouragement, constructive feedback, and a positive evaluation record that the teacher and family desperately need.

Positive learning outcomes are only built from building a strong foundation of basics; it grows gradually each day, and through struggling readers' willingness, obsession and perseverance can end with the accomplishment of objectives overcoming all difficulties and challenges in the end. The teachers should toil on the grassroots and work their way up to learners' positions. It is the collective, coordinated, collaborative, and concerted action from teachers, parents, peers, students, and administration that convert predetermined goals into a reality that eventually turns into a strong foundation

for a bright career.

This study contributes to a better understanding of what difficulties and challenges EFL readers face reading authentic texts and how teachers address from first to last using planned and organized instructions. Evidence shows that struggling students benefit from the suggestions much more than other students. In essence, students must be highly motivated and highly disciplined if they are to learn effectively in and out of the classroom environment. We precisely reckon that the determined struggling readers struggle at text reading never look back at the school days that they were at; however, embark on their new journey as keen readers and herald their new future. The EFL readers need to believe that the academic credentials without communication skills would no longer harvest the same returns that might have been true even a decade ago.

'Read, read and read' and 'Practice makes a reader perfect and fluent' are the only panaceas to struggling reader's problems and it would certainly swing struggling learners to arrive at middle-of-the-road where EFL teachers would facilitate and guide them under any circumstances. The learners have immeasurable talent and unbelievable potential which require to be tapped. The students overcoming reading difficulties and challenges indubitably fill the empty void with timely guidance, encouragement, constructive feedback, and a positive evaluation record that the teacher and family desperately need. What the enthusiastic readers have upheld is a reminder of the importance of EFL learning, at a time when it has been integrated into courses, but the EFL learning, by and large, is still beyond recognition in public life. The researcher strongly believes that budding EFL learners are the precious glow we perceive or misconceive in this gathering gloom.

REFERENCES

[1] Al-Hazmi, S. (2003). EFL teacher preparation programs in Saudi Arabia: Trends and challenges. *TESOL Quarterly, 37*(2), 341-344. Retrieved from: http://dx.doi.org/10.2307/3588509

[2] Al-Karroud, I. (2005). New interesting methods and techniques: English as it should be taught. *Al-Ma'rifah Journal, Vol. 1*, p. 120.

[3] Al-Mansour, N.S., & Al-Shorman, R.E.A. (2011). The effect of teacher's storytelling aloud on the reading comprehension of Saudi elementary stage students. *Journal of King Saud University, Languages and Translation, 23*(2), 69-76. DOI: org/10.1016/j.jksult.2011.04.001

[4] Al-Qahtani, A. (2010). *The effectiveness of metacognitive strategies on secondary stage students' achievement and attitudes towards English language* (MA thesis). Taif University, Saudi Arabia.

[5] Al-Roomy, M. (2013). *An action research study of collaborative strategic reading in English with Saudi medical students* (PhD thesis). University of Sussex, UK.

[6] Alsamadani, H. (2008). *The relationship between Saudi EFL college-level students' use of reading strategies and their EFL reading comprehension.* (Unpublished doctoral dissertation). Ohio University.

[7] Al-Yacoub, I. (2012). Sum of all fears: Arabs read an average of 6 pages a year, study reveals. *Al Arabiya News Online.* http://www.alarabiya.net/articles/2012/07/14/226290.html. Retrieved on 22 August 2021.

[8] Alzahrani, J. (2009). Saudi secondary school male students' attitudes towards English: An exploratory study. *King Saud University Languages & Translation Journal, 20*, 25-36.

[9] Bender, W. N. (2012). *Learning Difficulties and Education.* (ISBN: 978-605-133-179-9). Ankara: Nobel.

[10] Bendriss, R. & Golkowska, K. (2011). Early reading habits and their impact on the reading literacy of Qatari undergraduate students. *Arab World English Journal, 2*(4), 37-57.

[11] Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed.). White Plains: Pearson Education.

[12] Catts, H., Hogan, T., & Adolf, S. (2005). *Developmental changes in reading and reading disabilities.* In H. Catts & A. Kamhi (Eds.), *Connections between language and reading disabilities* (pp. 25–40). Mahwah, NJ: Erlbaum.

[13] Duke, N.K., & Pearson, D. (2002). Effective practices for developing reading comprehension. Newark, DE: International Reading Association.

[14] Ehri, L. (1991). Development of the ability to read words. In R. Barr, M. Kamil, P. Mosenthal, & P. Pearson (Eds.), *Handbook of reading research Volume II* (pp. 383-417). New York: Longman.

[15] Elwer, Å. (2014). *Early predictors of reading comprehension difficulties.* Linköping University: Department of Behavioural Sciences and Learning. Hove, UK: Psychology Press.

[16] Goodman, K. (1973). *Analysis of reading miscues.* In Smith, F. Psychologist and Reading. New York: Rinhast and Winson.

[17] Grabe, W. P., & Stoller, F. L. (2011). *Teaching and researching reading* (2nd ed.). London, UK: Pearson Education Ltd.

[18] Hammerberg (Hassett), Dawnene. D. (2004). *Technologies of the self in classrooms designed as "learning environments":* (Im)possible ways of being in early literacy instruction. New York: Peter Lang.

[19] Hedgcock, J., & Ferris. D. (2009). *Teaching readers of English: Students, texts and context.* New York: Routledge.

[20] Hidi, S., & Renninger, K.A. (2006). The four-phase model of interest development. *Educational Psychologist, 41*(2), 111-127.

[21] Hoover, W., & Gough, P. (1990). The simple view of reading. *Reading and Writing, 2,* 127- 160.

[22] Ismail, A., & Yusof, N. (2016). Readability of ESL picture books in Malaysia. Journal of Nusantara Studies, *1*(1), 60-70.

[23] Jraissati, Y. (2010). *Who said Arabs don't read?* http://jraissati.com/2010/10/who-said-arabs-dont-read/ Retrieved on 22 August 2021

[24] Kechichian, J. A. (2012). Arab populations don't read enough. *Gulf News Newspaper*. https://gulfnews.com/opinion/op-eds/arab-populations-dont-read-enough-1.1023935 Retrieved on 22 August 2021

[25] Kintsch, W. (2013). Revisiting the construction-integration model of text comprehension and its implications for instruction. In D. E. Alverman, N. J. Unrau, & R. B. Ruddell (Eds.), *Theoretical models and processes of reading* (pp. 807-839). Newark, DE: International Reading Association.

[26] Kirby, J. R., & Savage, R. S. (2008). Can the simple view deal with the complexities of reading? *Literacy, 42*, 75-82.

[27] Klingner, J.K., Vaughn, S., & Boardman, A. (2007). *Teaching Reading Comprehension to Students with Learning Difficulties.* New York, NY: The Guilford Press.

[28] Krashen, S., & Brown, C. L. (2007). What is academic language proficiency? *STETS Language and Communication Review, 6*(1), 1-4.

[29] Lyon, G.R., Shaywitz, S.E., & Shaywitz, B.A. (2003). Defining dyslexia, comorbidity, teachers' knowledge of language and reading: A definition of dyslexia. *Annals of Dyslexia, 53,* 1-14.

[30] Muortaga, K.R. (2005). Some Reading Problems of Arab EFL Students. *Al-Aqsa University Magazine.* https://www.alaqsa.edu.ps/site_resources/aqsa_magazine/files/122.pdf Retrieved on 24 August 2021

[31] Mustafa, G. (2002). *English Language teaching and learning at government schools in the United Arab Emirates* (Unpublished doctoral dissertation). University of Exeter, UK.

[32] Paananen, M., Aro, T., Kultti-Lavikainen, N., & Ahonen, T. (2009). *Learning disability assessment: Cooperation between the psychologists, teachers and parents.* Helsinki: Niilo Maki Institute.

[33] Qrqez, M., & Rashid, R. A. (2017). Reading comprehension difficulties among EFL learners: The case of first and second year students at Yarmouk University in Jordan. *Arab World English Journal, 8*(3), 421-431.

[34] Rahman, M. M., & Alhaisoni, E. (2013). Teaching English in Saudi Arabia: Prospects and challenges. *Academic Research International, 4*(1), 112-118.

[35] Raihan, S. & Nezami, A. (2012). A critical study of comprehension strategies and general problems in reading skill faced by Arab EFL learners with special reference to Najran University in Saudi Arabia. *International Journal of Social Sciences & Education, 2*(3), 306-316.

[36] Rajab, H & Al-Sadi, A. (2015). An empirical study of reading habits and interests of Saudi University EFL learners. *International Journal of Linguistics, 7*(2), 1-17.

[37] Rashid, R. A. (2012). Vocabulary learning among less proficient young adults using children's stories. *Mextesol Journal*, *35*(1), 15-28.

[38] Rivers, W.M. (1981). *Teaching Foreign-Language Skills.* The University of Chicago Press, Chicago.

[39] Sharma, V. (2015). How do Productive Skills of Saudi Students Affect EFL Learning and Teaching? *Asian Journal of Humanities and Social Sciences, vol. 3* (2), pp. 91-99.

[40] Sharma, V. (2018). Influence Factors in Students' Motivation for Communicative Competence in English: A Case Study in Saudi Arabia. *Journal of Literature, Languages and Linguistics, vol. 50,* pp. 37-47.

[41] Sharma, V. (2019). Saudi Students' Perspective on Social Media Usage to Promote EFL Learning. *International Journal of Linguistics, Literature and Translation, vol. 2* (1), pp. 129-139.

[42] Snow, C. E., Burns, M.S., & Griffin, P. (1998). *Preventing reading difficulties in young children.* Washington, DC: National Academy Press.

[43] Torgesen, J. K. (2000). Individual differences in response to early intervention in reading: The lingering problem of treatment resisters. *Learning Disabilities Research and Practice, 15*(1), 55-64.

[44] Westwood, P. (2008). *What Teachers Need to Know About Reading and Writing Difficulties* Australia*:* ACER.

[45] Yıldırım, K. (2010). *İs Birlikli Öğrenme Yönteminin Okumaya İliskin Bazı Değiskenler Üzerindeki Etkisive Yönteme İliskin Öğrenci-Veli Görüsleri.* Yayımlanmamıs Doktora Tezi. Gazi Üniversitesi, Gazi Eğitim Bilimleri Enstitüsü, Ankara.

[46] Yunus, K., Mohamad, M., & Waelateh, B. (2016). The breadth of receptive vocabulary knowledge among English major university students. *Journal of Nusantara Studies, 1*(1), 7-17.

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Integration of Perceptual Similarity With Faithful Mapping of Phonological Contrast in Loanword Adaptation: Mandarin Chinese Adaptation of English Stops

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Abstract—In loanword phonology, perceptual similarity and faithful mapping of phonological contrast are two main factors which influence loanword adaptation. Previous studies observe that English phonological voicing contrast is mapped to Mandarin Chinese (hereafter, Mandarin) phonological aspiration contrast, indicating faithful mapping of phonological contrast. Nevertheless, the role of perceptual similarity in adaptation of English stops to Mandarin has not been fully explored. The current study investigates the influence of perceptual similarity on loanword adaptation by examining how English voiced and voiceless stops are adapted in Mandarin Chinese using a data set of 1427 novel Mandarin loanwords from English. The results show consistent adaptation of English voiced stops as Mandarin unaspirated stops and English aspirated voiceless stops as Mandarin aspirated ones, while inconsistent adaptation patterns are found for the English unaspirated voiceless stops. In particular, English post-/s/ unaspirated voiceless stops which occupy a similar voice onset time (VOT) region to Mandarin unaspirated stops are adapted as Mandarin unaspirated ones, whereas the rest are mapped to aspirated stops in Mandarin. The overall adaptation patterns provide partial support to faithful mapping of phonological contrast and provide robust evidence for an integration of perceptual similarity with faithful mapping of phonological contrast in loanword adaptation.

Index Terms—loanwords, consonant adaptation, Mandarin Chinese, perceptual similarity, phonological contrast

I. INTRODUCTION

When a word is borrowed by one language (the borrowing language) from another language (the donor language), sound adaptation of the word must conform to the segmental inventory, prosodic patterns and phonotactic constraints of adapters' native language while trying to maintain faithfulness to the words in the donor language (Kenstowicz & Suchato, 2006).

Various accounts have been put forward with regard to the ways in which loanwords are adapted. Currently, three main approaches have been proposed, namely the phonological approach (e.g. Jacobs & Gussenhoven, 2000), the perceptual approach (e.g. Boersma & Hamann, 2009; Peperkamp & Dupoux, 2003) and the phonetics-phonology approach (e.g. Yip, 1993, 2006). The major difference between the first two approaches lies in whether the foreign inputs to adaptation are processed at the phonological level to maintain faithful mapping of phonological contrast, or at the perceptual level where perceptual similarity matters. Taking an intermediate position, the third approach integrates perceptual similarity with phonological contrast to obtain the best match of the foreign inputs in adaptation.

In the current study, we examine how a native speaker of Mandarin Chinese (hereafter, Mandarin) adapts English voiced and voiceless stops, aiming to investigate the influence of perceptual similarity on loanword adaptation revealed by the adaptation patterns of English stops to Mandarin. We use a new and larger data set of Mandarin loanwords from English than those in previous studies which mainly collected a limited number of established Mandarin loanwords from English in dictionaries.

In the segmental inventory of English, there are three pairs of stop phonemes /p, b/[1], /t, d/ and /k, g/. The oppositions within each pair are distinguished by the distinctive feature of voicing. In different contexts, the voiceless stops are either aspirated or unaspirated. Aspiration, meaning "voiceless interval consisting of strongly expelled breath between the release of the plosive and the onset of a following vowel" (Cruttenden, 2014, p.163), is a nondistinctive feature in

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[1] Slash brackets / / are used to refer to underlying or phonological representations of sounds while square brackets [ ] represent the surface forms (phonetic realisation) of the sounds.

English but a distinctive one in Mandarin (Table 1). With regard to voice onset time (VOT), which is "the interval between the release burst and the onset of voicing" (Cruttenden, 2014, p.164), English post-/s/ unaspirated voiceless stops occupy a similar VOT region to Mandarin unaspirated stops.

TABLE 1
DIFFERENCE IN PHONOLOGICAL CONTRAST AND PHONETIC SIMILARITY BETWEEN ENGLISH AND MANDARIN STOPS

	[±voice]	[±aspirated]	Phonetic similarity
English	• *phonological contrast* • voiceless vs. voiced • e.g. **p**ie /**p**aɪ/ vs. **b**uy /**b**aɪ/	• *allophonic variation* depending on different contexts • allophones for English voiceless stops • e.g. **p**ot [pʰɔt], su**p**er [ˈsu.**p**ə], s**p**y [s**p**aɪ]	Similar VOT values between English post-/s/ unaspirated voiceless stops and Mandarin unaspirated stops
Mandarin	(not applicable)	• *phonological contrast* • aspirated vs. unaspirated • e.g. 塔 [tʰǎ] "tower" vs. 打 [tǎ] "to beat"	

Note: post-/s/ stops = stops in /sC/ clusters such as [sp] in "spy"

The different phonological contrasts between English and Mandarin stops, and neutralised distinction between English unaspirated voiceless stops and Mandarin unaspirated stops in terms of perceptual similarity, warrant examination from the perspective of the three approaches which differ in what kind of information matters in loanword adaptation. In particular, Mandarin has a phonological aspiration contrast, whereas in English voicing is a phonologically contrastive feature and aspiration is a nondistinctive feature. Paradis and Tremblay (2009) find a consistent mapping of English phonological voicing contrast to Mandarin phonological aspiration contrast in adaptation of English stops to Mandarin, supporting the phonological approach. Kim (2012) and Hui and Oh (2015), however, report a few observations of adapting English unaspirated stops to Mandarin unaspirated ones, indicating that perceptual similarity plays a role.

The current study extends the previous research in that we not only examine the general adaptation patterns for English voiced and voiceless stops to Mandarin, but also separate English unaspirated voiceless stops by different surrounding contexts into post-/s/ and single stops to further explore the issue of perceptual similarity and phonological contrast in loanword adaptation.

II. BACKGROUND

This section first introduces three major approaches regarding the ways in which loanwords are adapted. Next, the phonological features and phonetic properties of English and Mandarin stops are introduced. On the basis of previous studies, research questions of the study are proposed.

A. Approaches to Loanword Adaptation

1. The Phonological Approach

Jacobs and Gussenhoven (2000) argue for a "universal phonological vocabulary" that native grammar of the hearers of a language plays a crucial role in adaptation of foreign segments. For instance, native speakers of Cantonese (a dialect of Chinese) perceive the voiced stop coda /b/ in the English word "club" /klʌb/, but they just don't allow [+voice] in their native language. Paradis and Tremblay (2009), in favour of the phonological approach, report that English voiceless stops are adapted as Mandarin aspirated voiceless stops regardless of aspiration. They conclude that English stop aspiration which is a phonetic cue doesn't influence Mandarin phoneme categorisation. Stress-to-tone mapping of Mandarin loanwords from English is also found "to be constrained by tonal feature model of native phonology, while acoustic similarity plays a very limited role" (Li, 2017). In short, according to the phonological approach, speakers of the borrowing language identify segmental contrasts in the donor language as phonologically equivalent sounds in their native language that stand for similar contrasts.

2. The Perceptual Approach

On the other hand, Silverman (1992) proposes "Perceptual Level" and "Operative Level" for the rule-based account of loanword phonology. At the Perceptual Level, the inputs are not processed at the phonological level but have a phonetic status that conforms to the borrowing language's segments and tones. For instance, English stop aspiration is predictable and hence it is not in the underlying representation but in the phonetic form. Because of perceptual similarity in aspiration, English "pie" [pʰaɪ] is adapted into [pʰay] in Cantonese while English "motor" [ˈməʊ.tə] into Cantonese [mɔ.ta]. In other words, the adapters process the inputs based on aspiration which is phonemic in Cantonese. In addition, Silverman (1992) notes that less salient segments are deleted because they are less likely to be detected than the salient ones at the Perceptual Level. Furthermore, Peperkamp and Dupoux (2003) state that the adaptation of an illicit input follows an idea of "phonetically minimal transformation" where phonetic distance matters. Paradis and Tremblay (2009), though argue against the perceptual approach, admit that the perceptual approach correctly predicts the adaptation of English voiced stops as Mandarin unaspirated ones based on similar VOT regions between them. To sum up, according to the perceptual approach, speakers of the borrowing language map the sounds in the donor

language to the perceptually closest ones in their native language and faithful mapping of phonological contrast does not play a role.

3. The Phonetics-phonology Approach

Neither the phonological nor perceptual approach is sufficient to explain variable loanword adaptation. Alternatively, the phonetics-phonology approach believes that both perceptual and phonological factors matter in loanword adaptation and tries to integrate perceptual similarity with phonological equivalence. Silverman (1992) favours the perceptual approach but proposes that perceptual similarity is within the scope of the borrowing language's phonology. Yip (2006) notes that perception alone can't explain loanword adaptation and grammatical factors also play a role. The loanword adaptation model in Yip (2006) is "L2 source → Perceptual module → non-native percept → L1 grammar → Adapted loanword". Moreover, Hsieh et al. (2009) also argue that perceptual salience forms an important dimension of phonological faithfulness. Furthermore, perceptual similarity seems to be mediated by phonological system of the adapters. Kang and Schertz (2021) investigate the role of Korean listeners' phonological knowledge of a non-native language in cross-language mapping and find that though they are sensitive to perceptual similarity between the foreign input and native output, their loanword adaptation is constrained by "the (perceived) phonological categories of the [non-native] input". In a study of Mandarin loanwords from English, Chen and Lu (2020) investigate the effects of vowel duration, syllable duration and nasalization on loanword adaptation and report that phonotactic constraints play a more crucial role than phonetic cues do in accounting for adaptation of singleton nasals over nasal geminates.

In a nutshell, the phonological approach argues that the inputs of adaptation come from underlying representation in the donor language, namely the phonological contrast. The perceptual approach claims that the inputs are phonetic details and emphasises perceptual salience of segments. Yet neither of the two approaches can perfectly predict patterns of loanword adaptation. An intermediate approach is thus proposed that both perceptual similarity and phonological contrast in adapters' language play important roles in loanword adaptation.

B. English and Mandarin Stops

Differences in segmental inventory and similarities in phonetic properties between English and Mandarin stops will be introduced below, which can provide a window into the investigation of the influence of perceptual similarity on adapters' phonemic categorisation in loanword adaptation.

1. Phonological Features of Stops in English and Mandarin

English stops are categorised according to voicing and the place of articulation, namely labial voiceless /p/ and voiced /b/, dental voiceless /t/ and voiced /d/ and velar voiceless /k/ and voiced /g/ (Table 2). Voicing is contrastive in English such that a voiceless stop and a voiced stop are two phonemes in the same place of articulation. For example, /t/ and /d/ are two phonemes in English and contrast word meanings like "tuck" /tʌk/ versus "duck" /dʌk/.

TABLE 2
INVENTORY OF ENGLISH CONSONANTS (GIEGERICH, 1992, P.41)

Labial	Dental	Velar
p b	t d	k g

Note: voiceless phonemes on the left and voiced ones on the right within a cell

For each voiceless stop, there is a classification of aspiration. Aspirated and unaspirated allophones of the English voiceless stops do not contrast word meanings and only differ in phonetic manifestation. The environment for aspirated stops is either (1) at the beginning of a syllable and before a stressed nucleus, e.g. [pʰ] in the word "companion" [kʰəm.'pʰæ.njən] or (2) at the beginning of a word, e.g. [pʰ] in the word "pot" [pʰɔt] (Rogers, 2013, p.50), whereas unaspirated stops are found in other contexts such as before an unstressed nucleus or after the fricative /s/ (Hayes, 2009, p.122), e.g. [p] in the word "super" ['su.pə] and the word "spy" [spaɪ], respectively (Table 3).

TABLE 3
ALLOPHONES FOR ENGLISH VOICELESS STOPS (CRUTTENDEN, 2014, P.173)

Context	[±aspiration]	Example
Syllable initial, accented	aspirated	**p**ot [pʰɔt]
Syllable initial or final, unaccented	unaspirated to slightly aspirated	su**p**er ['su.pə]
Post-/s/, accented	unaspirated	s**p**y [spaɪ]

Note: post-/s/ stops = stops in /sC/ clusters such as [sp] in "spy"

In Mandarin, all the stops are voiceless and are categorised according to aspiration and the place of articulation (Table 4). The two phonemes /t/ and /tʰ/ can distinguish words carrying the same lexical tone, 塔 /tʰǎ/ "tower" and 打 /tǎ/ "to beat", whereas the sounds [t] and [tʰ] which belong to the same phoneme /t/ in English do not contrast word meanings.

TABLE 4
INVENTORY OF MANDARIN CONSONANTS (DUANMU, 2007, P.26)

Labial	Dental	Velar
p pʰ	t tʰ	k kʰ

Note: unaspirated phonemes on the left and aspirated ones on the right within a cell

2. Phonetic Properties of English and Mandarin Stops

Acoustically, an aspirated stop has a long positive VOT and an unaspirated stop a short VOT in English (Table 5). Among unaspirated voiceless stops, syllable-initial post-/s/ stops show similar VOTs to voiced stops (Cho et al., 2014). On the other hand, VOTs of single unaspirated voiceless stops preceding an unstressed vowel are slightly longer than those of post-/s/ stops (Antoniou et al., 2010). For instance, [p] in the word "super" ['su.pə] has a longer VOT than that in the /sC/ clusters in the word "spy" [spaɪ]. With regard to places of articulation, labial stops have shorter VOTs than those of dental stops which are shorter than those of velar ones (Menyuk & Klatt, 1975).

TABLE 5
MEAN VOTS (MS) OF ENGLISH STOPS IN THE LITERATURE (JONES & MEAKINS, 2013; KLATT, 1975)

	voiced			voiceless					
	[b]	[d]	[g]	[p]	[t]	[k]	[pʰ]	[tʰ]	[kʰ]
single	11	17	27	22	38	39	47	65	70
post-/s/	n.a.	n.a.	n.a.	12	23	30	n.a.	n.a.	n.a.

Note: single stops = single stops before an unstressed vowel, such as [p] in "super"; post-/s/ stops = stops in /sC/ clusters such as [sp] in "spy"; n.a. = not applicable

Furthermore, English and Mandarin stops fall in the similar VOT regions. The VOT values of English voiced stops and unaspirated voiceless stops are similar to those of Mandarin unaspirated stops while VOTs of English aspirated stops are relatively shorter than those of Mandarin aspirated stops (Tables 6 and Fig 1).

TABLE 6
MEAN VOTS (MS) OF MANDARIN STOPS (RAN & SHI, 2007)

unaspirated			aspirated		
[p]	[t]	[k]	[pʰ]	[tʰ]	[kʰ]
13	14	30	106	104	112

English	• voiced stops (e.g. **b**uy /**b**aɪ/) • post-/s/ unaspirated voiceless stops (e.g. s**p**y)	• single unaspirated voiceless stops (e.g. su**p**er ['su.**p**ə])	• aspirated voiceless stops (e.g. **p**ie /**p**aɪ/)
Mandarin	• unaspirated stops (e.g. 打 [t**ǎ**] "to beat")		• aspirated stops (e.g. 塔 [tʰǎ] "tower")
VOT	**0-30 ms**	**30-40 ms**	**> 40 ms**

Figure 1. Comparison of VOTs of Stops in English and Mandarin

In sum, there exists an overlap of VOTs between voiced stops and post-/s/ stops in English as well as similarity in VOTs between English and Mandarin stops. Thus, the current study collects a new and larger novel loanword data set to investigate the influence of perceptual similarity on adapting English words into Mandarin, from the perspective of the three approaches to loanword adaptation.

C. Research Questions

Three specific research questions will be addressed:

(1) Is voiceless-vs-voiced contrast for English stops adapted as aspirated-vs-unaspirated stops for Mandarin? (If yes, it supports the phonological approach which favours faithful mapping of phonological contrast.)

(2) Are English aspirated and unaspirated voiceless stops adapted as Mandarin aspirated and unaspirated stops respectively? (If yes, it supports the perceptual approach which favours perceptual similarity and disfavours faithful mapping of phonological contrast.)

(3) Is voiceless-vs-voiced contrast for English stops adapted as aspirated-vs-unaspirated stops for Mandarin, with an exception that English unaspirated voiceless stops with two different surrounding contexts (post-/s/ and single) are adapted as different segments in Mandarin? (If yes, it supports the phonetics-phonology approach which integrates perceptual similarity with faithful mapping of phonological contrast.)

III. METHOD

A. Data Collection

The source of the data is a vocabulary book covering English vocabulary written and released by a user at www.topsage.com, an online education resources sharing forum in China. The book includes the English vocabulary in secondary school textbooks in China. The author made an adaptation form on each word from English to Mandarin to help readers (secondary school students in China) to memorise English pronunciations and word meanings in the following way:

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English word: spider
Mandarin sentence: 四伯的儿子花四百块钱买了一只蜘蛛。
Pinyin: si.bo        de    er.zi  hua  si.bai.kuai.qian   mai.le  yi.zhi  zhi.zhu
IPA:    szz.pʷoo     tɤɤ   ər.tszz  xʷaa  szz.pai.kʰʷai.tɕʰan  mai.lɤɤ  jii.tʂrr  tʂrr.tʂʷuu
Gloss:  fourth uncle  of    son    pay   four hundred       buy     one     spider
English sentence: "The son of the fourth uncle pays four hundred for a spider."
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The novel Mandarin loanwords from English in the data set are nonwords and are rarely used in real life, which means most of them are not found in formal loanword corpora or dictionaries containing established loanwords such as Mandarin loanwords from English brand names. Therefore, it provides new data for Mandarin loanwords from English which is less affected by non-phonological factors such as analogy (Paradis & Tremblay, 2009).

The data set consists of 1465 stops in 1427 Mandarin loanwords from English after removing irrelevant words. The novel words which were not adapted solely on the English pronunciation were not relevant to this study, and hence were not included. There were 645 (44%) aspirated voiceless stops, 301 (20%) unaspirated voiceless stops and 519 (36%) voiced stops. The procedures of processing each English word and its made-up Mandarin word are as follows.

English words were automatically transcribed in International Phonetic Alphabet (IPA) by one of the largest online dictionary service providers "youdao.com" using *The 21st Century Unabridged English-Chinese Dictionary* (Li, 2003). Pinyin was added on the Mandarin words and segments were transcribed in IPA based on the phonological forms of Mandarin syllables in Duanmu (2007).

B. Different Predictions by the Three Approaches

The three approaches predict different adaptation patterns of English stops to Mandarin. The predictions are as follows (See Figures. 2-4). We expect that the data set will provide evidence to support one or more of the predictions.

(1) The phonological approach predicts the mapping of English phonological voicing contrast to Mandarin phonological aspiration contrast. For instance, both English [p] and [pʰ] are adapted as Mandarin [pʰ] and English [b] is adapted as Mandarin [p].

(2) The perceptual approach predicts the mapping of English stops to Mandarin stops based on perceptual similarity and perceptual salience, regardless of faithful mapping of phonological contrast. For instance, English [pʰ] is adapted as Mandarin [pʰ], whereas English [p] is adapted as Mandarin [p]. English [b] is adapted as Mandarin [p] as well.

(3) The phonetics-phonology approach predicts the mapping of English phonological voicing contrast to Mandarin phonological aspiration contrast while perceptual similarity plays a role in salient context such as post-/s/ stops. For instance, English [pʰ] is adapted as Mandarin [pʰ]. English single [p] preceding an unstressed vowel or at a syllable-final position is adapted as [pʰ] as well, whereas [p] in /sC/ clusters is adapted as Mandarin [p]. English [b] is also adapted as Mandarin [p].
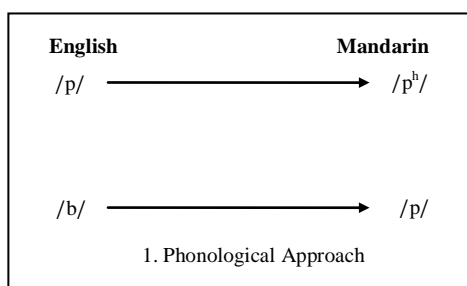

Figure 2. Predictions of Adaptation of English Stops Into Mandarin by the Phonological Approach
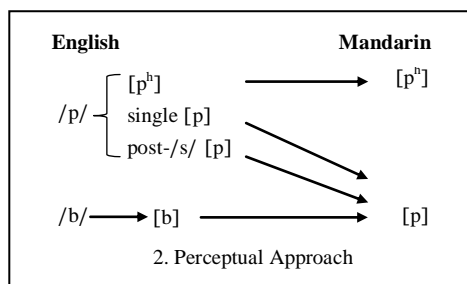
Figure 3. Predictions of Adaptation of English Stops into Mandarin by the Perceptual Approach.
Note: single stops = single stops before an unstressed vowel or at a syllable-final position, such as [p] in "super"; post-/s/ stops = stops in /sC/ clusters such as [sp] in "spy"
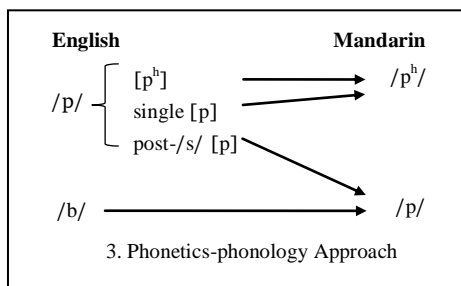

Figure 4. Predictions of Adaptation of English Stops Into Mandarin by the Phonetics-phonology Approach.
Note: single stops = single stops before an unstressed vowel or at a syllable-final position, such as [p] in "super"; post-/s/ stops = stops in /sC/ clusters such as [sp] in "spy"

IV. RESULTS

A. General Adaptation Patterns of English Voiced and Voiceless Stops

As shown in Table 7, English aspirated voiceless stops are all adapted as Mandarin aspirated ones, and English voiced stops are all adapted as Mandarin unaspirated voiceless stops. English unaspirated voiceless stops are more often adapted as Mandarin aspirated stops than unaspirated stops, implying a less significant role of perceptual similarity. Nonetheless, there is still inconsistent adaptation of English unaspirated voiceless stops. Chi-square tests were conducted to compare the number of words being adapted as aspirated stops and the number of words being adapted as unaspirated stops in Mandarin. There are significant differences between the two adaptation patterns across different English stops.

TABLE 7
NUMBER OF ASPIRATED AND UNASPIRATED STOPS IN MANDARIN ADAPTED FROM ENGLISH STOPS

	Voiceless stops in English		Voiced stops in English
	aspirated	unaspirated	
Aspirated stops in Mandarin	301 (100%)	536 (83%)	0
Unaspirated stops in Mandarin	0	109 (17%)	519 (100%)
Sum	301	645	519
Chi-square	$\chi^2 = 301$, df = 1, $p < .001$	$\chi^2 = 282.7$, df = 1, $p < .001$	$\chi^2 = 519$, df = 1, $p < .001$

Examples of the adaptation patterns for English voiced and voiceless stops are listed in Table 8. For the adaptation of English unaspirated voiceless stops, the two distinct patterns are found where the pre-unstress single stop in (2) and the post-/s/ stop in (3) are adapted as the aspirated and unaspirated stops in Mandarin respectively. It appears that different surrounding contexts may affect the adaptation of English unaspirated voiceless stops.

TABLE 8
ADAPTATION OF ENGLISH STOPS TO MANDARIN

	Adaptation	English word	Context	IPA	Mandarin word	IPA
(1)	[pʰ] → [pʰ]	**p**ublish	accented	[ˈ**pʰ**ʌb.liʃ]	怕薄利士	[**pʰ**aa pʷoo lʲii ʂrr]
(2)	[p] → [pʰ]	car**p**et	single	[ˈkɑː.**p**it]	卡皮特	[ka **pʰ**ʲii tʰɤɤ]
(3)	[p] → [p]	s**p**ot	post-/s/	[s**p**ɔt]	石宝他	[ʂrr **p**au tʰaa]
(4)	[b] → [p]	**b**itter	n.a.	[ˈ**b**i.tə]	比他	[**p**ʲii tʰaa]

Note: single stops = single stops before an unstressed vowel, such as [p] in "super"; post-/s/ stops = stops in /sC/ clusters such as [sp] in "spy"; n.a. = not applicable

B. Adaptation of Single and Post-/s/ English Unaspirated Voiceless Stops

A closer examination of adaptation of English unaspirated voiceless stops with different surrounding contexts shows two distinct patterns. English post-/s/ stops in /sC/ clusters, such as [sp] in "spy", mostly yield unaspirated adaptation as Mandarin [p], whereas single stops before an unstressed vowel or at a syllable-final position, such as [p] in "super", tend to be adapted as the Mandarin aspirated stop [pʰ] (Table 9). Chi-square tests reveal that the number of words being adapted as aspirated stops and the number of words being adapted as unaspirated stops are significantly different across surrounding contexts and places of articulation.

Since the VOT of a post-/s/ stop is relatively shorter than that of a single stop, the two distinct patterns imply the role of perceptual similarity in mapping post-/s/ stops to Mandarin unaspirated ones while single stops to Mandarin aspirated ones. Furthermore, the English unaspirated voiceless stops in the two types of structures have identical features of [+aspiration] and [-voice], indicating that perceptual similarity overrides the faithful mapping of phonological contrast in the adaptation of English unaspirated voiceless stops in Mandarin.

Among the three English post-/s/ unaspirated voiceless stops, the percentage of being adapted as Mandarin aspirated stops increases as the place of articulation for the stops goes from labial to velar.

TABLE 9
NUMBER OF ASPIRATED AND UNASPIRATED STOPS IN MANDARIN ADAPTED FROM ENGLISH UNASPIRATED VOICELESS STOPS

	[p]		[t]		[k]	
	single	post-/s/	single	post-/s/	single	post-/s/
Aspirated stops in Mandarin	79 (98%)	0	277 (98%)	6 (12%)	170 (98%)	4 (17%)
Unaspirated stops in Mandarin	2 (2%)	34 (100%)	7 (2%)	43 (88%)	4 (2%)	19 (83%)
Sum	81	34	284	49	174	23
Chi-square	$\chi^2 = 73.2$, df = 1, $p<.001$	$\chi^2 = 34$, df = 1, $p<.001$	$\chi^2 = 256.7$, df = 1, $p<.001$	$\chi^2 = 27.94$, df = 1, $p<.001$	$\chi^2 = 158.4$, df = 1, $p<.001$	$\chi^2 = 9.8$, df = 1, $p<.01$

Note: single stops = single stops before an unstressed vowel or at a syllable-final position, such as [p] in "super"; post-/s/ stops = stops in /sC/ clusters such as [sp] in "spy"

V. DISCUSSION

The current study examined the adaptation patterns of English words into Mandarin based upon novel Mandarin loanwords from English, aiming to investigate the influence of perceptual similarity on loanword adaptation. Overall, the results reject the perceptual approach but provide partial support to the phonological approach and provide robust evidence for the phonetics-phonological approach.

The answer to the first research question is partly YES. The results show that English voiced stops [b, d, g], and English aspirated voiceless stops [pʰ, tʰ, kʰ] are adapted as Mandarin unaspirated and aspirated stops respectively, indicating the partial preservation of phonological contrast.

The answer to the second research question is NO. There is no consistent adaptation of English aspirated voiceless stops to Mandarin aspirated ones and English unaspirated voiceless stops to Mandarin unaspirated ones.

The answer to the third research question is YES. English unaspirated voiceless stops [p, t, k], however, are either adapted as Mandarin aspirated or unaspirated stops, suggesting integration of perceptual similarity with faithful mapping of phonological contrast. Compared with the unaspirated segments [p], the segments [k] and [t] have relatively lower percentages of being adapted as Mandarin unaspirated stops.

In what follows, we further discuss partial preservation of phonological contrast, and integration of perceptual similarity with faithful mapping of phonological contrast.

A. Partial Preservation of Phonological Contrast

English phonological voicing contrast is mapped to Mandarin phonological aspiration contrast, which echoes the previous studies (Hui & Oh, 2015; Kim, 2012; Paradis & Tremblay, 2009) which report adaptation of English voiced stops to Mandarin unaspirated and English voiceless stops to Mandarin aspirated stops. Underlying phonological contrasts are preserved in adaption of English stops into Mandarin stops. The "voiced versus voiceless" contrast in English is preserved as "unaspirated versus aspirated" contrast in Mandarin in loanword adaptation, since voicing in English and aspiration in Mandarin are both phonemic categorisation. The results partially confirm the predictions by the phonological approach (Jacobs & Gussenhoven, 2000; LaCharité & Paradis, 2005; Paradis & Tremblay, 2009).

B. Integration of Perceptual Similarity with Faithful Mapping of Phonological Contrast

Firstly, distinct patterns are found in English unaspirated voiceless stops in different places of articulation. The English post-/s/ dental and velar stops [t] and [k] have a relatively higher percentage of being adapted as Mandarin aspirated stops than the velar stop [p], which echoes Hui and Oh (2015) who report a larger ratio of aspirated adaptations for both English unaspirated [t] and [k] than [p]. This is explained by the facts that the segments [t] and [k]

have longer VOTs than that of the segment [p]. As the place of articulation moves from the labial to the velar, the ratio of adapting English post-/s/ stops as Mandarin aspirated ones also increases.

Secondly, the current study finds that English post-/s/ unaspirated voiceless stops are adapted as Mandarin unaspirated ones while the single ones are adapted as Mandarin aspirated stops. The distinct adaptation patterns between single and post-/s/ stops are accounted for by differences in VOT values. Since English post-/s/ unaspirated voiceless stops occupy the 0-30 ms VOT region where is also occupied by English voiced and Mandarin unaspirated stops, it is expected that hearers of the borrowing language perceive the shorter VOTs and map the sounds as unaspirated in their native grammar. Despite belonging to the same phonological category, post-/s/ stops have shorter VOTs than those of single stops, which means that they are more likely to be perceived as English voiced stops and Mandarin unaspirated stops than single stops. In contrast, , English single unaspirated voiceless stops are consistently assigned to Mandarin aspirated stops since they normally have longer VOTs than those of the post-/s/ stops, and more importantly, their surface phonetic details are less salient than those of post-/s/ stops. It is speculated that the degree of perceptual saliency interacts with perceptual similarity in loanword adaptation. When it is less salient, adapters tend to preserve faithful mapping of phonological contrast rather than try to achieve the best match to the surface phonetics of the inputs.

The variable adaptation patterns for English unaspirated voiceless stops are not explicitly examined in Paradis and Tremblay (2009) who report consistent mapping of English unaspirated voiceless stops to Mandarin aspirated ones. Though Kim (2012) and Hui and Oh (2015) show a few cases where English unaspirated stops are adapted as Mandarin unaspirated stops, they do not differentiate post-/s/ stops from the single ones and treat them as the same category, which might be a confounding factor.

These results confirm the predictions in the phonetics-phonology approach (Hsieh et al., 2009; Kenstowicz, 2012; Kim, 2012; Yip, 1993, 2006). Perceptual similarity plays a role because it overrides preservation of phonologically contrastive feature in the adaptation of post-/s/ English stops. Nonetheless, English phonological voicing contrast is consistently preserved in the mapping to the phonologically equivalent aspiration contrast in Mandarin, indicating that perceptual similarity is mediated by phonological factors (Chen & Lu, 2020; Kang & Schertz, 2021).

VI. CONCLUSION

Through a study of the adaptation of English novel loanwords in Mandarin, this study attempts to answer the questions of how English voiced and voiceless stops are adapted to Mandarin and whether perceptual similarity plays a role in adapting English words into Mandarin, from the perspective of the three approaches to loanword adaptation.

Firstly, the results show that English voiced are adapted as Mandarin unaspirated stops and English aspirated voiceless stops as Mandarin aspirates stops, which disfavours the perceptual approach but provides partial support to the faithful mapping of phonological contrast proposed by the phonological approach.

Secondly, for English unaspirated voiceless stops, the single stops are adapted as Mandarin aspirated stops and the post-/s/ stops as Mandarin unaspirated stops, providing robust evidence for the phonetics-phonological approach which integrates perceptual similarity with phonological contrast in loanword adaptation.

Future research can include more data of adaptation of English stops to Mandarin from various sources. Users of China's social media have produced some loanwords from English. Also, the findings show that the adaptation patterns of English unaspirated voiceless stops are complex. An English unaspirated voiceless stop can have more than one segment mapping in Mandarin. An analysis with OT (Optimality Theory) may offer more insights into the various adaptation patterns.

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REFERENCES

[1]   Antoniou, M., Best, C. T., Tyler, M. D., Kroos, C. (2010). Language context elicits native-like stop voicing in early bilinguals' productions in both L1 and L2. *Journal of Phonetics*, *38* (4), 640-653.
[2]   Boersma, P., Hamann, S. (2009). Loanword adaptation as first-language phonological perception. In A. Calabrese, W. L. Wetzels (Eds.), *Loan Phonology* (pp. 11-58). Amsterdam & Philadelphia: John Benjamins.
[3]   Chen, Y. Y., Lu, Y. A. (2020). Variation in loanword adaptation: A case from Mandarin Chinese. *Second Language Research*, First published online 7 October 2020, 1-25.
[4]   Cho, T., Lee, Y., Kim, S. (2014). Prosodic strengthening on the /s/-stop cluster and the phonetic implementation of an allophonic rule in English. *Journal of Phonetics*, *46* (1), 128-146.
[5]   Cruttenden, A. (2014). *Gimson's Pronunciation of English* (8th ed.). London & New York: Routledge.
[6]   Duanmu, S. (2007). *The Phonology of Standard Chinese*. (2nd ed.). Oxford: Oxford University Press.
[7]   Giegerich, H. (1992). *English Phonology: An Introduction*. Cambridge: Cambridge University Press.
[8]   Hayes, B. (2009). *Introductory Phonology*. Malden, MA: Wiley-Blackwell.

[9]   Hsieh, F., Kenstowicz, M., Mou, X. (2009). Mandarin adaptations of coda nasals in English loanwords. In A. Calabrese, W. L. Wetzels (Eds.), *Loan Phonology* (pp. 131-154). Amsterdam & Philadelphia: John Benjamins.

[10]   Hui, Y., Oh, M. (2015). Adaptation of English stops into Mandarin Chinese. *Linguistic Research*, *32* (2), 403-417.

[11]   Jacobs, H., Gussenhoven, C. (2000). Loan phonology: Perception, salience, the lexicon and OT. In J. Dekkers, F. van der Leeuw & J. van de Weijer (Eds.), *Optimality Theory*: *Phonology, Syntax, and Acquisition* (pp. 193-210). Oxford: Oxford University Press.

[12]   Jones, C., Meakins, F. (2013). Variation in voice onset time in stops in Gurindji Kriol: Picture naming and conversational speech. *Australian Journal of Linguistics*, *33* (2), 196-220.

[13]   Kang, Y., Schertz, J. (2021). The influence of perceived L2 sound categories in on-line adaptation and implications for loanword phonology. *Natural Language & Linguistic Theory*, *39* (2), 555-578.

[14]   Kenstowicz, M. (2012). Cantonese loanwords: Conflicting faithfulness in VC rime constraints. *Catalan Journal of Linguistics*, *11*, 65-96.

[15]   Kenstowicz, M., Suchato, A. (2006). Issues in loanword adaptation: A case study from Thai. *Lingua*, *116* (7), 921-949.

[16]   Kim, T. E. (2012). *A Study of Mandarin Loanwords: Lexical Stratification, Adaptation and Factors*. Ph.D. dissertation. Maddison: University of Wisconsin-Maddison.

[17]   Klatt, D. H. (1975). Voice onset time, frication, and aspiration in word-initial consonant clusters. *Journal of Speech and Hearing Research*, *18* (4), 686-706.

[18]   LaCharité, D., Paradis, C. (2005). Category preservation and proximity versus phonetic approximation in loanword adaptation. *Linguistic Inquiry*, *36* (2), 223-258.

[19]   Li, H. J. (2003). *The 21st Century Unabridged English-Chinese Dictionary*. Beijing: China Renmin University Press.

[20]   Li, J. (2017). Tonal adaptation of English loanwords in contemporary Mandarin. *The Journal of Chinese Linguistics*, *45* (2), 423-450.

[21]   Menyuk, P., Klatt, M. (1975). Voice onset time in consonant cluster production by children and adults. *Journal of Child Language*, *2* (2), 223-231.

[22]   Paradis, C., Tremblay, A. (2009). Nondistinctive features in loanword adaptation: The unimportance of English aspiration in Mandarin Chinese phoneme categorization. In A. Calabrese, W. L. Wetzels (Eds.), *Loan Phonology* (pp. 211-224). Amsterdam & Philadelphia: John Benjamins.

[23]   Peperkamp, S., Dupoux, E. (2003). Reinterpreting loanword adaptations: The role of perception. In M. J. Solé, D. Recasens, J. Romero (Eds.) *Proceedings of the 15th International Congress of Phonetic Sciences* (pp. 367-370). Barcelona: Universitat Autònoma de Barcelona.

[24]   Ran, Q. B., Shi, F. (2007). Putonghua danyinjie zhong baofayin de VOT fenxi [VOT analysis of stops in mono-syllables of Standard Chinese]. *Nankai Yuyan Xuekan* [Nankai Linguistics], *(10)*, 21-31&154.

[25]   Rogers, H. (2013). *The Sound of Language: An Introduction to Phonetics*. London and New York: Routledge.

[26]   Silverman, D. (1992). Multiple scansions in loanword phonology: Evidence from Cantonese. *Phonology*, *9* (2), 289-328.

[27]   Yip, M. (1993). Cantonese loanword phonology and optimality theory. *Journal of East Asian Linguistics, 2* (3), 261-291.

[28]   Yip, M. (2006). The symbiosis between perception and grammar in loanword phonology. *Lingua, 116* (7), 950-975.

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Challenges in Translating Scientific Texts: Problems and Reasons

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Abstract—The demand for scientific and technical translation has increased because of the rapid scientific and technological development in developed countries and the need to spread these sciences and technologies in developing countries. This study aims to investigate the main problems encountered by translators in translating scientific texts from English into Arabic and reveal the main reasons behind these problems. In this study, a qualitative research design is applied, and the sample of this study consists of one scientific text with (938 words) translated by twenty BA students. The study reveals that translators faced lexical and syntactic problems while translating scientific text, such as word diction, preciseness, terminological consistency, word order (markedness), agreement, tense and aspect, and passive structure. Moreover, the study shows that a lack of translators' experience in this domain, students' total dependence on a literal translation, and the lack of awareness of the sensitivity of scientific texts are some of the most important reasons for these problems.

Index Terms—scientific translation, terminology, problems, English, Arabic

I. INTRODUCTION

Science and technology play a tremendous role in our lives. They are closely linked with aspects of society and human civilization's progress. The rapid development in scientific and technical fields has led to the growing demand for the technical translation since most products are published in English as a universal lingua franca. In this light, a technical translation could be viewed as one of the essential branches in the field of translation since what we have seen today is that approximately 90% of the translations on the global market are technical ones (Kingscott, 2002). However, dealing with such specialized texts is not easy because several issues and factors affect these texts, such as style and terminology (Al-Abbas & Haider, 2021). Farghal (2009) states that translating any text from one language into another may encounter many linguistic problems due to the structural variations between Arabic and English regarding vocabulary and syntax and the lack of linguistic knowledge of translators, which is the core of the translation competence.

According to Bell (1991), the notion of translator competence entails a lot of meanings which are; target-language knowledge, text-type knowledge, source-language knowledge, subject area ('real-world') knowledge, contrastive knowledge, and 'communicative competence' (covering grammar, sociolinguistics, and discourse). However, PACTE (2000) states that translation competence is built upon six subcomponents: communicative competence, extra-linguistic competence, psycho-physiological competence, transfer competence, and strategic competence. Therefore, the translator's competence in both languages (ST and TT) is a prerequisite to producing an appropriate text in the target language. This study aims to answer the following questions:

1. What are the main problems encountered by translators in translating scientific texts?
2. What are the main reasons behind these problems?

II. LITERATURE REVIEW

A. Scientific Translation and Requirements of Scientific Translator

With the development of science, scientific translation is considered one of the most important branches in the field of translation nowadays. According to Ghazalla (1995), scientific translation is mainly the process of rendering terms from one language into another in the fields of science and technology from different domains such as medicine, physics, chemistry, mathematics, and computer sciences. In a similar vein, Byrne (2006) states that a scientific translation could be related to science which the Chambers Dictionary defines as "knowledge ascertained by observation and experiment, critically tested, systematised and brought under general principles" (Chambers, 1992). In other words, scientific translation deals with pure science at all levels: "theoretical", "esoteric," and "cerebral glory" (Byrne, 2006, p.8). In addition, Byrne (2006) determines three essential characteristics: the subject matter, type of language, and purpose to distinguish this branch of translation from others, such as the technical one.

The development of science in developed Western nations and the emergence of new scientific terms may create problems to find equivalents for them. Nida (1964) states that rendering scientific terms that appeared in advanced western countries to languages of third-world developing countries could be a problematic task. This is due to the fact that the main aim of scientific and technical translation is not only to deliver the translated information correctly and

accurately from the SL into the TL but also to convey it in such a way that ensures recipients understand the information easily, properly, and effectively (Byrne, 2006).

Thivierge (2002) sheds light on the role of the translator in rendering any scientific text. He states that "the work of scientific translators is to achieve one primary goal: to write information in a clear, concise, and accurate manner" (Thivierge, 2002, p. 188). Furthermore, He determines nine requirements that any scientific translator should observe, which are: working appropriately for the target receivers, preserving the author's choices in the ST, understanding sciences, and having complete background information related to the ST, mastering the SL and the TL, asking constructive questions, working appropriately for publication, learning current practices, and delivering the product on time.

Similarly, Byrne (2006) investigates the requirements of scientific translators and their roles in the rendering process. He concludes that the scientific translator has a communicative role via the translated text since he should draw information about the text from different resources to ensure the correct understanding of the original text and then transfer it to the second language so that the recipient also understands. Byrne (2006, p. 17) adds,

> … The need for translators to conduct research so as to understand not just the text but also the subject while at the same time ensuring, by means of revisions and corrections, that the text conforms to target language norms and target audience expectations.

B. English- Arabic Scientific Translation

Rendering scientific and technical texts to the Arab World could reveal many linguistic issues. One of the most problematic ones is terminology and translation. Seiny (1985) mentions that Krollman (1976) states that terminology is responsible for about 40 to 60% of technical translator's errors, and finding the adequate equivalent term takes up about 50% of the translator's available time. Accordingly, it is natural for the agencies included in the Arabization of scientific terms to solve this problem before anything else (Sieny, 1985).

Following the same sense, Al-Hassnawi (2010) considers the translation of scientific terms as a "*real intellectual challenge*" that needs several requirements, such as skills, intelligence, and mastery of both the SL and the TL. Cabré and Sager (1999) define the terminology based on three levels; field, practice, and product. He states that "as field, terminology is a subject which is interested with specialized terms; as practice it is the series of principles oriented across term classification; finally, as product, it is a set of terms from giving subject field" (Cabré & Sager, 1999, p.8). Thus, Byrne (2006) concludes that terminology is the first noticeable part of any technical text and the fuel for transferring the text between languages.

Yowell and Lataiwish (2000) classify technical terms into two types; cross-cultural recognized terms and cultural specific terms. While the former deals with universal terms, i.e., terms that do not belong to a particular culture, the latter deals with terms that are specific and belong only to one language, i.e., the grammar terms and cultural specific terms which cause critical problems in translating texts.

C. Translation Equivalence

Comparing texts among different languages can be the main drive behind the appearance of equivalence theory. The emergence of this new notion causes many problems and heats the debates in the field of translation. Many theorists, such as Vinay and Darbelnet (1958), Jakobson (1959), Nida (1964), Catford (1965), House (1977), and Baker (1992), introduced different points of view regarding this concept based on different translational approaches (Leonardi, 2000).

According to a definition provided by Vinay and Darbelnet (1958) (in Kenny, 1998, p. 342), an equivalence-oriented translation could be viewed as a procedure which "replicates the same situation as in the original, whilst using completely different wording". Furthermore, they demonstrate that using such a procedure during the translation process will preserve the impact of the style used in the ST in the TT. Thus, based on their study, the method of equivalence is the optimal method to translate proverbs, idioms, clichés, and nominal or adjectival phrases.

However, Jakobson (1959) addresses the notion of "equivalence in difference," which is considered a revolution in the field of translation. He relies on his semiotic approach to classify translation into three main types, which are intralingual (within one language by paraphrasing and reordering), interlingual (between two different languages), and inter-semiotic translation (between sign-languages' systems). According to him, interlingual translation forces translators to utilize synonyms to convey the message embedded in the ST, meaning that there is no full or exact equivalence between code units. He acknowledges that "translation involves two equivalent messages in two different codes". i.e., although languages differ from one another in a grammatical point of view, the task of translation is still possible.

Leonardi (2000) claims that both Vinay and Darbelnet's (1958) procedure and Jakobson's (1959) theory emphasize that the translator is a decision-maker in the process of translation. When the translator feels that the linguistic approach is no longer appropriate to do the task of translation, he embarks to apply other procedures, such as loan translations and neologisms.

However, Nida (1964) distinguishes two different types of equivalence; formal and dynamic. While the formal equivalence aims at focusing attention on the form and the content of the original text, dynamic equivalence emphasizes the creation of the same equivalent effect on a target reader, i.e., the principle of equivalent effect. In his study, Nida (1964) determines three basic requirements that should exist to achieve a successful translation, which are: utilizing

natural expression, creating equivalent response (reader-oriented), and conveying the manner and the spirit of the original text (author oriented).

At the same period, Catford (1965) adopts different translation equivalence and develops a linguistic-based approach to translation. He differentiates between two types of equivalence, formal and textual, based on the functional linguistics of Halliday. According to the types mentioned above, translation is defined by Catford (1965, p. 20) as "the replacement of textual material in one language by equivalent textual material in another language". He illustrates that textual equivalence ranges between linguistic and contextual features.

It is worthy of mentioning here that the most significant achievement made by Catford in 1965 is the introduction of the translation shifts, where he defines them as "departures from formal correspondence in the process of going from the SL to the TL" (Catford, 1965, p.73). According to him, translation shifts could be classified into level shifts and category shifts. The second type falls into four levels; structure-shifts, class-shifts, unit-shifts, intra-system shifts.

House (1977) studies the semantic and pragmatic equivalence by highlighting the importance of the function of ST and TT. She demonstrates that the original and translated texts must have the same function determined by the situation in which the original text is embedded. House (1977) acknowledges that if the situational features of the ST differ from the TT, it is impossible to have the same equivalent function. Therefore, the quality of the translational product will not be high enough.

Finally, since the notion of equivalence has been a controversial field of discussion, it has been modified differently according to different linguistic levels such as grammar, texture, pragmatics, and others (Leonardi, 2000). In her work, Baker (1992) believes that the concept of equivalence can be defined upon certain conditions. It can be studied at different levels, including all various features of translation combining the linguistic and communicative approaches. She differentiates the following forms of equivalence:

1. **Equivalence at the Level of Word and above the Word**

   In her viewpoint, Baker claims that any translator should consider the equivalence of word-level as a first element. Many translators begin their work by looking for terms in the TL that directly give the equivalent of single words in ST. Baker defines this term because sometimes, the same word can be used to provide different meanings in different languages. She also attracts the translator's attention to some factors when dealing with a single word. These factors are number, gender, and tense.

2. **Grammatical Equivalence**

   Baker claims that sometimes there could be some differences in the grammatical structures between the SL and the TL. These differences may encourage the translator to delete or add information in the TT because the TL itself lacks specific grammatical devices. In this regard, she is interested in number, tense, aspect, voice, person, and gender.

3. **Textual Equivalence**

   It is a form of equivalence that pays attention to information and cohesion between the ST and the TT. Although translators have the option to preserve the cohesion and the coherence of the ST or not, they have to consider the following factors: the target audience, the purpose of the translation, and the text type.

4. **Pragmatic Equivalence**

   It is the form of equivalence that works on the author's intentions rather than their words. The translator, in this regard, has to be aware of the target context in order to convey the author's message in a method that the TT readers can clearly understand.

As demonstrated earlier, the notion of equivalence causes a problematic issue in the field of translation. Therefore, different scholars discussed this notion from different viewpoints to shed light on the importance of this concept to have a successful translation.

D. Translation Strategies

Many scholars have conducted many studies to examine translation strategies; such topic is discussed according to their points of view (Al-Khalafat & Haider, 2022; Al-Abbas & Haider, 2020; Debbas & Haider, 2020). However, most of them look at translation strategies as techniques, procedures, or methods used by translators to overcome any translational problem (Owji, 2013). Chesterman (1997) states that translation strategies suffer from "considerable terminological confusion", and he believes that these strategies have general features:

1. They involve text manipulation
2. They must be applicable
3. They are goal-oriented
4. They focus on the problem
5. They can consciously be applied
6. They must be empirical and understandable by the readers in addition to the person who uses them.

Although many scholars offer different definitions and classifications for the translation strategies, this study is concerned with the classifications of translation strategies introduced by Vinay and Darbelnet (1958/1995) and Baker (1992).

According to Vinay and Darbelent's (1958/1995) point of view, there are two methods of translation: direct/ literal translation and oblique translation, which can be used when the direct translation is impossible because of lexical and

syntactical differences between the two languages. In addition, oblique translation includes seven subcategories which are:

1. **Borrowing:**

   It is a strategy used when there is a gap between the SL lexicon and the TL one. In such a case, translators may transfer the SL lexicon directly into the TL. For example, rendering religious terms, such as "إمام, جهاد, حج" into English as "*hijj*", "*jihad*", "*Imam*".

2. **Calque:**

   Firstly, it is a special kind of borrowing where the form of the SL expression is borrowed into the TL, then all elements and components of the borrowed expression will literally be rendered into the TL. For example, rendering the noun phrase "*part-time job*" into "دوام بوقت جزئي" is an example of lexical calques while borrowing the English passive structure "*by-structure*" into "من قبل" is an example of structural calques.

3. **Literal Translation:**

   This type of translation transfers expressions, phrases, and clauses that existed in the ST into the TL literally without any change in terms of the TL grammars. What follows elaborate this strategy:

   ST:

   ف ي والمازوت ال سولار محل الـط بـ يعي الـ غاز بـ إحلال الـطاقة لـ ترشـ يد خطة تـ ذ فـ يذ والطاقة الـ كهربـ اء قـطاع خـ براء بـ دأ .لـ تـصدير ارال سولـ توفـ ير الـ توـل يدمحطات تـ شغـ يل

   TT:

   Experts of the electricity and energy have begun carrying out a project for the proper use of energy by substituting natural gas for solar and fuel oil in the operation of power stations to save the solar for export.

4. **Transposition:**

   That means using a one-word class instead of another without changing the meaning of the message. The following example illustrates this strategy:

   ST:

   Shake well before use. Hold can upright and spray from face and body. Note that the spray is released upwards from the top of the cap.

   TT:

   أن ملاحظة يـ جب .والـ جـ سم الـوجه عن بعيداً الـ بخاخ بـ رش وقـم عمودي بـ شكل الـ عـ بوة امسك .الا سـ تـعمال قـ بل جيداً الـ عـ بوة رج .الـ غطاء قمة من الأعـ لى نـ حو يـ نطلق الـ بخاخ

   As seen from the example above, the translator opts to render the English adverb "*upright*" into the Arabic prepositional phrase "بشكل عمودي" successfully, whereas he fails in rendering the English verb "*spray*" because of using "قم برش" instead of "رش".

5. **Modulation:**

   This subcategory means conveying the ST message in a different form by changing a point of view. For example, an oscillation between passive and active forms.

6. **Equivalence:**

   It is used to translate any idiom, proverb, or nominal or adjectival phrase by presenting different stylistic and structural methods. For example, rendering the Arabic idiom "على أحر من الجمر" into "*to be on tenterhooks*".

7. **Adaptation:**

   It occurs when there is a cultural difference between the source and target languages. In this case, a special kind of equivalence is required, i.e. situational equivalence. For example, changing the proper English noun in a simile "he is rich as *Croesus*" into "قارون" in the Arabic expression "يملك مال قارون".

However, Baker (1992) introduces a taxonomy of eight translation strategies used by professional translators to cope with non-equivalence issues of translation. These strategies are:

1. **Translation by a more General Word**

   This strategy is used with many types of non-equivalence, especially in the field of propositional meaning. Since meaning is not language-dependent in the semantic field, Baker believes that this strategy works appropriately in most languages, if not in all.

2. **Translation by a more Neutral/less Expressive Word**

   This strategy is concerned with the semantic field as well.

3. **Translation by Cultural Substitution**

   This strategy replaces a culture-specific item or expression with another item in the target language. However, a target expression does not have the same propositional meaning of a source expression, but it creates the same effect on the target reader. Such a strategy results in making the translated text more natural, more understandable, and more familiar to the target reader. According to Baker, applying this strategy depends on two factors:

   a. The degree of freedom the translator enjoys.

   b. The skopos of the translation (i.e. the purpose of the translation).

4. **Translation Using a Loan Word or Loan Word plus Explanation**

This strategy looks helpful with culture-specific items, modern concepts, and buzz words, especially when the word is repeated many times in the text. In this case, the translator will mention the loan word with an explanation to clarify its meaning to target readers at the first time; then, the word will be used as it is next time.

5. **Translation by Paraphrase Using a Related Word**

This strategy is used in two cases; if a concept in the SL is lexicalized in the TL by a different form or if a concept with a certain form is repeated many times in the ST, that would not be natural and readable in the TT.

6. **Translation by Paraphrase Using Unrelated Words**

This strategy can be used when a particular concept in the ST is not lexicalized in the TL. In this case, translators may rely on modifying a superordinate or unpacking the meaning embedded in the source item.

7. **Translation by Omission**

Omitting an item or expression could sometimes be necessary to avoid lengthy explanations when that item or expression does not add much to the text's overall meaning.

8. **Translation by Illustration**

This strategy can be used when the item in the target language fails to convey all the features and aspects of the word in the source language. In order to avoid over-explanation and to translate the item or expression concisely, this strategy can be used successfully.

Baker's (1992) classification of translation strategies seems to have the most applicable set of strategies that professional translators can test to check its applicability.

E. Empirical Studies

Sharkas (2009) investigates the translation's quality of popular science articles and sheds light on the techniques and strategies utilized by translators to overcome these problems to produce an adequate translation. The research data in her study is dawn from five issues of *Majallat al-'Uluum*, the Arabic version of the Scientific American, and their translations. The data are analyzed based on Hervey and Higgins' (1992) translation model and assessed on five textual levels: genre, cultural, semantic, formal, and varietal. Sharkas (2009) concludes that there are some translation problems on different levels. For example, idioms and names of people, institutions, and projects are the main issues on the cultural level. The translation of scientific terms is the main problem on the semantic level, and compound structures and nominalizations are the main problems on the formal level. Finally, the register is the central problem in this genre on the varietal level.

Similarly, Sa'eed and Malalla (2014) exhibit the problems encountered by translators in translating biochemical texts from English into Arabic. The sample of this study consists of one SL text containing 28 sentences. These sentences are simple, compound, or complex, rendered by translators on several occasions. The data are analyzed based on several levels: syntactic, semantic, and stylistic. The study reveals that employing loan translation (transference) in many cases is irreplaceable because of a wide gap between the SL and TL. In addition, it is possible to reach the stage of complete loyalty to the original text, but this is at the expense of the stylistic level. Finally, translating biochemical texts from one language into another encounters several problems at different levels of analysis; syntactic, stylistic, or semantic levels. The most serious one is the semantic one since the whole meaning could be distorted.

Argeg (2015) examines the problems of translating medical terms from English into Arabic and how competent postgraduate students and Arabic translators who work in the medical field have tackled these problems. In her study, a quantitative research design, as well as a quantitative, is adopted in collecting data. The sample of this study consists of forty-five English medical terms extracted from different medical reports, namely National Health Service (NHS) leaflets and flyers, and World Health Organization (WHO) reports for 2007 and 2008. The study finds that translating medical terms from English into Arabic poses many challenges to both students and professional translators. Furthermore, it highlights the importance of training translators who work in the medical field. Also, the study concluded that the main reasons that could lie behind these problems are the lack of students' experience in medical translation, literal translation, inconsistency, and the lack of using up-to-date English-Arabic medical dictionaries.

However, Awang and Salman (2017) study the main translation and Arabicization strategies utilized by the academy in its terminology work. The sample of this study consists of ten English scientific and technical terms with their translational and Arabicized equivalents collected from the Arabic Language Academy of Cairo (Cairo ALA). A descriptive and comparative analysis is adopted in this study. The study reveals that different translation methods, such as borrowing (loan word), loan translation (calque), and literal translation (word-for-word) are employed to compensate the loss resulting in the process of translation, and Arabicization ones, such as outright phonetic borrowing, loan translation, derivation, and composition, are also utilized.

III. METHODOLOGY

This section explains the methodology followed in conducting the current study. It starts with a description of the data selected and is followed by a description of data analysis.

A. Data Source and Sample of the Study

The sample of this study consists of one English text entitled "*Facts on Honey and Cinnamon*" retrieved from this website *https://www.gadourychiropractic.com/blog/72056-facts-on-honey-and-cinnamon*, and its translation is done by 20 undergraduate students, at the third and fourth level, studied at Jadara University in Jordan. Those students were taught by the researcher in 2020. The text consists of *938 words* composing different types of sentences as simple, compound, and complex.

B. Data Analysis and Procedures

This study relies on syntactic issues and lexical items to analyze data. These issues involve word order (markedness), agreement, tense and aspect, passive structure, word diction, preciseness, and terminological consistency.

C. Procedures

In this study, the following procedures are adopted:
Step 1: Selecting an English scientific text and ensuring that the text is not translated on the internet.
Step 2: Sending the ST to the students to translate.
Step 3: Comparing the ST with the different translation versions.
Step 4: Determining the translated extracts with lexical or syntactic errors in the translation.
Step 5: Classifying these extracts based on the type of the error, whether lexical, such as word diction, preciseness, and terminological consistency, syntactic, such as word order (markedness), agreement, tense, and aspect and passive structure or translation strategies, such as and substitution.

IV. RESULTS AND DISCUSSION

This study aims to analyze and assess the translation of a scientific text entitled *Facts on Honey and Cinnamon* from English (as a SL) into Arabic (as a TL), and investigate the main reasons behind these problems. According to Nord (2018), determining the type of the text affects the type of lexis, vocabulary, syntactic structure, even cultural items, etc., used inside that text. Thus, the selected text falls under the informative text type.

Analysis (Assessing the Translation Product)

The translator may encounter several problems during the translation process due to the differences among languages in terms of sound, lexis, grammar, and style. Thus, the analysis of the selected text is based on two main issues: linguistic issues (lexical and syntactic problems) and issues regarding translation strategies (addition, deletion, and substitution) followed when needed to emphasize a theoretical thought and/or idea by the most relevant research.

A. Linguistic Issues

In this section, the translation of the selected text is analyzed in terms of lexical items and syntactic issues.

1. Syntactic Issues

Differences among languages may cause various syntactic problems. The number of these problems depends on the relations among languages, i.e., whether they belong to the same language family. As for Arabic and English, the probability of encountering many syntactic problems is very high because each language belongs to a different family. Based on the analysis, the most syntactic problems encountered by the translator of the selected translated text are the following:

a. Word Order (Markedness)

According to Hawkins (1980), English is considered an analytic language, meaning the word order and the function words are the main determinants of the syntactic relationships. In contrast, Arabic is considered a synthetic one which means the inflectional forms are the determinants of the syntactical relationships among the components of the sentence.

In English, SVO is the basic unmarked word order, and this word order determines the syntactic function of sentence elements. However, thematic reordering in English is allowed. It can be achieved by thematic fronting and thematic postponement. On the other hand, the basic word order in Arabic is VSO, and the variation in the ordering of sentence elements is dependent on syntactic, stylistic, rhetorical, and contextual factors (Khalil, 2010). Thus, according to Saraireh (2014, p.196), "any other grammatically permissible word orders in both languages are marked", and changing any syntactic positions of sentence elements within a functional structure of any clause will overtly indicate different interpretations (Gunther, 2012).

Regarding the translation process, the translator should not change the word order from unmarked in the ST into marked in the TT or vice versa if it is not justifiable. The following tables include various examples that show how unmarked sentences translated into marked and vice versa.

TABLE 1
EXAMPLES OF UNMARKED SENTENCES TRANSLATED INTO MARKED

ST	TT	Suggestion
Honey and Cinnamon are used to solve serious health problems.	العسل والقرفة يُستخدمان لحل مشاكلات صحية خطيرة	يُستخدم العسل والقرفة لحل مشكلات صحية خطيرة
Scientists of today also accept honey as a 'Ram Ban' (very effective) medicine for all kinds of diseases.	والعلماء المعاصرون يقرّون أنّ العسل دواء ذو فاعلية عالية ضدّ الأمراض	ويقر العلماء المعاصرون أنّ العسل دواء ذو فاعلية عالية ضدّ الأمراض
Regular use of the above process relieves loss of breath and strengthens the heartbeat.	الاستخدام المنتظم للنظام المذكور أعلاه يخفف من آلام ضيق التنفس ويقوّي نبض القلب.	يخفف الاستخدام المنتظم للنظام المذكور أعلاه من آلام ضيق التنفس ويقوّي نبض القلب
Arthritis patients may take daily, morning, and night, One cup of hot water with two spoons of honey and one small teaspoon of cinnamon powder.	مرضى الروماتيزم يمكن أن يتناولو كوب من الماء الدافئ ممزوجاً مع ملعقتين من العسل وملعقة صغيرة من مسحوق القرفة يوميا صباحاً ومساءً.	يمكن أن يتناول مرضى الروماتيزم يومياً كوب من الماء الساخن ممزوجاً مع معلقتين من العسل وملعقة صغيرة من مسحوق القرفة صباحاً ومساءً.

As Table 1 shows, the English sentences have unmarked word order (SVO), which means that the original writer would not focus on any element of the sentence since marked order is utilized for encoding pragmatic information such as focus and saliency and marking information structure (Khalil, 2010). However, in the target text, the translator changed the word order of the sentences from unmarked (VSO) into marked (SVO), but reordering sentence elements in Arabic, whether obligatory or optional, are based on certain conditions which are not applied here. Even when translating unmarked into marked might be understood by the Arab readers, it is not acceptable in standard Arabic.

On the other hand, analysis of the text along with the translation shows that some English sentences which have marked word order were translated into unmarked Arabic ones. Table 2 shows specific examples of sentences translated from marked into unmarked.

TABLE 2
EXAMPLES OF MARKED SENTENCES TRANSLATED INTO UNMARKED

ST	TT
Honey is produced in most of the countries of the world	ويُنتَج العسل في معظم دول العالم
Honey can be used without any side Effects for any kind of diseases.	ويمكن أن يُستخدم العسل بدون أي آثار جانبية لأي مرض من الأمراض.
Recent research in Japan and Australia has revealed that advanced cancer of the stomach and bones have been cured successfully	وقد أظهرت أبحاث أجريت مؤخراً في اليابان وأستراليا بأنه قد تمت معالجة سرطان المعدة والعظام المتقدم بنجاح

As Table 2 shows, marked English sentences (passive sentences) are rendered into unmarked Arabic verbal sentences because fronting and postposing in Arabic have syntactic and rhetorical motivations which are not applied here (Khalil, 2010). i.e., the syntactic system of the Arabic language does not allow maintaining markedness. Thus, the translator was forced to shift markedness.

b. Agreement

According to Khalil (2010), the English language has two types of concord, grammatical and notional. Subject-verb agreement and pronoun reference agreement fall under the grammatical concord, whereas semantic plurality falls under the notional one.

In English, reflexive, relative, and demonstrative pronouns should agree with their antecedents in gender and number, whereas in Arabic, pronouns should agree with their antecedents in number, gender, and case. Thus, a good translator should take these distinctions into consideration (Aziz, 1989).

Analysis of the text along with the translation shows that the translator paid attention to this point except for two instances, as shown in Table 3.

TABLE 3
EXAMPLES OF LACK OF PRONOUN REFERENCE AGREEMENT

ST	TT	Suggestion
Make a paste of honey and cinnamon powder, apply it on bread, instead of jelly and jam, and eat it regularly for breakfast.	اصنع عجينة من العسل ومسحوق القرفة، وادهنه على قطعة خبز بدلاً من المربَّى أو الجلي وتناولها بانتظام على الفطور.	اصنع عجينة من العسل ومسحوق القرفة وادهنها على قطعة خبز بدلاً من المربى أو الجلي وتناولها بانتظام على الفطور
Take two tablespoons of cinnamon powder and one teaspoon of honey in a glass of lukewarm water and drink it. It destroys the viruses in the bladder.	تناول معلقتي طعام من مسحوق القرفة وملعقة صغيرة من العسل مع كوب ماء دافئ واشربها. فهي تقتل الفيروسات في المثانة.	تناول معلقتي طعام من مسحوق القرفة وملعقة صغيرة من العسل مع كوب ماء دافئ واشربه. فهو يقتل الفيروسات في المثانة.

As Table 3 shows, the pronoun *it* in the first example refers to *a paste* as an antecedent, whereas in the TT there is no gender agreement between the bound pronominal clitic *hu* and its antecedent عجينة where عجينة is feminine in gender. So, the translator should use the pronoun *haa* to agree with its antecedent. However, in the second example, the pronoun *it* refers to *a glass of lukewarm water*. In Arabic, *glass* كوب is masculine in gender, and thus the translator should use the bound pronominal clitic *hu* instead of *haa* in the first instance and the independent nominal pronoun *huwa* هو instead of

hiya هي in the second one.

c. Tense and Aspect

Regarding tense, English, as well as Arabic, has two simple tenses: past and present. On the other hand, the aspect of perfectness that commonly appears in English is missing in Arabic. Therefore, translators should be careful that the English perfective is realized by *have + ed participle*, whereas the Arabic perfective is realized by *qad + perfect*.

Based on the researcher's analysis, it is observed that the translator encountered a problem in rendering the present perfect tense in different parts of the selected text. The following examples illustrate this point:

TABLE 4
EXAMPLES OF ERRORS IN RENDERING TENSE AND ASPECT

ST	TT	Suggestion
Weekly World News <u>has given</u> the following list of diseases that can be cured by honey and cinnamon	أصدر<u>ت</u> ويكلي وورلد نيوز قائمة الأمراض التالية التي يمكن معالجتها بالعسل والقرفة	<u>وقد أصدرت</u> ويكلي وورلد نيوز قائمة الأمراض التالية التي يمكن معالجتها بالعسل والقرفة
In America and Canada, various nursing homes <u>have treated</u> patients successfully and <u>have found</u> that…	<u>عالجت</u> العديد دور رعاية المسنين المرضى بنجاح باستعمال هذا النظام الغذائي من العسل والقرفة، <u>ووجدت أنَّ</u> …	<u>وقد عالجت</u> دور رعاية المسنين باستعمال هذا النظام الغذائي من العسل والقرفة المرضى بنجاح <u>وقد وجدت أنَّ</u>…
<u>A scientist in Spain has proved</u> that honey contains a natural ingredient	<u>أثبت</u> باحث في إسبانيا أنَّ العسل على يحتوي مكون طبيعي	<u>وقد أثبت</u> باحث في إسبانيا أنَّ العسل يحتوي على مكون طبيعي

As Table 4 shows, the translator rendered the present perfect tense *has given, have treated, have found and has proved* by using the past tense أصدر، عالج، وجد، أثبت which are equivalents to past tense in Arabic without adding the particle *qad* قد Therefore, he fails to convey the identical meaning of the ST in terms of aspect.

d. Passive Structures

Arabic prefers active structures rather than passive whenever the agent of the sentence is known. However, the translator of this text tended to render the agentive English passive into agentive Arabic passive by borrowing the English syntactic structure. The following examples illustrate this point:

TABLE 5
EXAMPLES OF ENGLISH PASSIVE STRUCTURES TRANSLATED LITERALLY

ST	TT	Suggestion
If it <u>is taken regularly by arthritis patients</u>, they can be cured.	<u>فإذا أخذ بانتظام من قبل مرضى</u> الروماتيزم، سيساعد ذلك في شفائهم.	<u>فإذا تناوله مرضى الروماتيزم بانتظام</u>، سيساعد ذلك في شفائهم.
as it <u>was researched by western scientists</u>:	كما بُحث من قبل العلماء الغربيين.	كما بَحث العلماء الغربيون ذلك.

As Table 5 shows, the translator resorted to borrowing the English syntactic structure to transfer the agentive passive by using the Arabic prepositional phrase

من قبل, but he should have used the active form.

2. Lexical Items

The second issue that the analysis touches upon is problems with regard to lexical items. It is observed that the translator encountered some lexical problems in terms of word diction, such as preciseness, consistency, and borrowing.

a. Word Diction

Diction refers to word choice, which is important to express human emotions and thoughts. One of the problems faced by translators is choosing the appropriate word that fits the context. In this analysis, word diction with regard to preciseness, consistency, and borrowing is discussed.

b. Preciseness

In translation, the precision in choosing appropriate words is considered one of the most critical points that technical translators should pay more attention to it because dealing with specialized texts is a very sensitive issue. Therefore, a good translator is one who picks the precise words among the groups of semantically related words in the TL which fit the context.

The analysis of the selected text showed that the translators encountered a problem in the precision of the word diction in many instances in the translated text. This is illustrated in the following table.

TABLE 6
EXAMPLES OF LACK OF PRECISION

ST	TT	Suggestion
Today's science says that even though honey is sweet, if taken in the right <u>dosage</u> as a medicine, it does not harm diabetic patients.	يقول العلم الحديث أن العسل غير مؤذٍ لمرضى السكري بالرغم من حلاوة مذاقه إذا أخذ كدواء <u>بالمقدار</u> الصحيح.	يقول العلم الحديث أنَّ العسل غير مؤذٍ لمرضى السكري بالرغم من حلاوة مذاقه إذا أخذ كدواء <u>بالجرعة</u> الصحيحة.
<u>Upset</u> Stomach	<u>تلبّك</u> المعدة	اضطراب المعدة
Those suffering from common or <u>severe</u> colds should take...	يجب على الأشخاص الذين يعانون من النزلات البرديَّة المعتادة أو <u>الشديدة</u> تناول...	يجب على الأشخاص الذين يعانون من النزلات البرديَّة المعتادة أو الحادة تناول...
And digests the <u>heavy</u> meals	ويساعد على هضم الوجبات <u>الثَّقِيلة</u>	ويساعد على هضم الوجبات الدسمة
Weight <u>Loss</u>	<u>تخسيس</u> الوزن	فقدان الوزن

As Table 6 shows, the translator rendered the word *dosage* into مقدار, but according to the context, the choice مقدار is the wrong Arabic equivalent in this context since *dosage* here means جرعة *"the* amount of medicine that you should take at any one time*"* rather than مقدار which means "an amount of something". However, in the second example, the word *upset* is rendered into تلبّك which is an incorrect choice since تلبّك is used with *intestines*. Thus, the correct choice is اضطراب. In the third example, the translator tended to use the adjective الشديدة as an equivalent to *severe* to modify the noun *colds.* This choice is incorrect since حاد is collocated with نزلة برد rather than شديدة. Whereas, the translator translated the adjective *heavy* into ثَقيلة in the fourth example, which is an incorrect choice. In Arabic وجبة is collocated with the adjective دسمة not ثَقيلة. Finally, in the last example, the translator translated the word *loss* into تخسيس which is a wrong choice in this context. The precise choice is فقدان which means "gradual decline in amount or activity".

c. Terminological Consistency

Using synonyms for the same concept is not preferred in technical translation since inconsistency in terminologies may cause confusion for non-specialist readers. Thus, whenever a specific signifier is used by the translator for a specific concept, this concept should be used throughout the whole text.

In this parallel text, it is observed that students oscillate among two categories of inconsistencies in the TT. The first one uses the synonymous Arabic words alternately, and the second one uses the Arabic and the loan forms alternately. Good examples are provided in the Table 7.

TABLE 7
EXAMPLES OF LACK OF CONSISTENCY

ST	TT	Suggestion
Arthritis	روماتيزم (ثم لاحقاً "التهاب المفاصل")	التهاب المفاصل
Cold	نزلة برد (ثم لاحقاً "رشح")	رشح
Pimples	بثور جلدية (ثم لاحقاً "حبوب")	بثور جلدية
Influenza	إنفلونزا (ثم لاحقاً "النَّزلة الوافدة")	النَّزلة الوافدة

As can be seen in Table 7, the translator in the first three examples varied in using the synonymous Arabic words of the same concept. However, in the last example, the word *"Influenza"* is once rendered as a loan word إنفلونزا and another as النزلة الوافدة. Such inconsistencies are considered errors in translation since they may confuse non-specialist readers.

d. Borrowing

Borrowing is considered one of the common translation strategies that can be achieved by several techniques, such as loan form, loan translation, and loan blends Vinay and Darbelnet (in Venuti, 2000). Depending on the analysis, it is observed that students tended to use the loan form technique in many instances to transfer the concepts and their lexical items from the ST into the TT. The following table illustrates this point.

TABLE 8
EXAMPLES OF LOAN WORDS

ST	TT	Suggestion
Viruses	فيروسات	حمَّات
Bacterial	بكتيري	جرثومي
Eczema	أكزيما	قوباء
Vitamins	فيتامينات	——
Cholesterol	كولسترول	——

As Table 8 shows, the translator resorted to using the loan form technique to render the ST terms *cholesterol, viruses, bacterial, vitamins, influenza,* and *eczema* into Arabic. However, when referring to Arabic *dictionaries*, we observed that there are Arabic equivalents for *viruses, bacterial, and eczema,* which means that the translator did not give priority to the native creation and immediately jumped to the loan form. However, we observed that the translator used this technique correctly regarding the terms *cholesterol and vitamins* because there are no Arabic equivalents for them.

B. Translation Strategies (Addition, Omission, and Substitution)

Global translation strategies determine the local ones. *Addition, omission, and substitution* are common techniques

that translators may resort to solve lexical or pragmatic problems. Newmark (1988) points out that translators may tend to add extra information to clarify some cultural, technical, and linguistic elements or may tend to omit unnecessary information. Thus, using such techniques should be justifiable.

Based on the analysis, translators added extra information in two instances and omitted information in one instance, as illustrated in Tables 9 & 10.

TABLE 9
EXAMPLES ON ADDITION

ST	TT	Suggestion
In America and Canada, various nursing homes have treated patients successfully.	في أمريكا وكندا، عالجت العديد من دور رعاية المسنين المرضى بنجاح باستعمال هذا النظام الغذائي من العسل والقرفة	———
Applying honey and cinnamon powder in equal parts on the affected parts, cures eczema, ringworm and all types of skin infections.	وضع عجينة من العسل ومسحوق القرفة على الأجزاء المصابة تشفي من الأكزيما والقوباء الحَلقِيَّة (مرض جلدي مُعدٍ)، وكلّ أنواع الالتهابات الجلديّة	———

As Table 9 shows, the translator in the first example added the phrase باستعمال هذا النظام الغذائي من العسل والقرفة in the TT to clarify that the main reason for the recovery is using honey and cinnamon. Whereas, in the second example, the translator added the noun phrase, مرض جلدي مُعدٍ, to clarify that *ringworm* is an infectious disease since القوباء الحلقية is uncommon in Arabic. Thus, these additions are justifiable since they were used to make the text clearer to the target readers.

TABLE 10
EXAMPLES OF OMISSION

ST	TT	Suggestion
Weekly World News, a Magazine in Canada, on its issue dated 17 January, 1995 has given the following list of diseases	أصدرت ويكلي وورلد نيوز في عددها الصادر في 17 يناير كانون ثاني 1995 قائمة الأمراض التالية	وقد أصدرت مجلة ويكي وورلد نيوز الكندية في عددها الصادر في 17 يناير كانون ثانٍ 1995 قائمة الأمراض التالية

As Table 10 shows, the translator deleted the nonrestrictive appositive *a Magazine in Canada,* which does not contain any essential information for identifying the noun. Thus, such deletion is justifiable since it did not change the basic meaning of the sentence.

V. CONCLUSION

This study aims to investigate the main problems encountered by translators in translating scientific texts. In addition, it aims to analyze the main reasons that could lie behind these problems. Based on the analysis above, the study reveals that the main problems encountered by the students in translating scientific texts are syntactic problems that cover word order (markedness), agreement, tense and aspect and passive structure, lexical issues, which cover word diction, preciseness, and terminological consistency, and inaccurate use of translation strategies which cover addition and omission.

It seems possible that these problems are due to the lack of translator's experience in scientific translation, and the need to train students more on this domain, and to offer more than one course for technical and scientific translation. Furthermore, students do not differentiate between stylistic variation and inconsistency regarding technical and scientific terms. Utilizing synonyms in such texts is very difficult since it creates a kind of ambiguity and inconsistency in concept-signifier correspondence. In addition, students' total dependence on a literal translation and the lack of awareness of the sensitivity of scientific texts is one of the most important reasons for these problems. These findings are in agreement with Argeg (2015) and Saraireh (2001 & 2014).

REFERENCES

[1] Al-Abbas, L. S., & Haider, A. S. (2021). Using Modern Standard Arabic in Subtitling Egyptian Comedy Movies for the Deaf/Hard of Hearing. *Cogent Arts & Humanities*, *8*(1). https://doi.org/10.1080/23311983.2021.1993597

[2] Al-Abbas, L. S. & Haider, A. S. (2020). Evaluating the Accuracy and Consistency in Rendering Qur'anic Terms with Overlapping Meanings into English. *Al-Bayan: Journal of Qur'an and Hadith Studies,* 18 (2), 111-137. DOI: https://doi.org/10.1163/22321969-12340083

[3] Al-Hassnawi. A. R. A. (2010, May 20). *Aspects of Scientific Translation: English into Arabic Translation as a Case Study*. Retrieved from http://www.translationdirectory.com/article10.htm

[4] Al-Khalafat, L., & Haider, A. S. (2022). A Corpus-assisted Translation Study of Strategies Used in Rendering Culture-bound Expressions in the Speeches of King Abdullah II. *Theory and Practice in Language Studies*, *12* (1), 130-142. DOI: https://doi.org/10.17507/tpls.1201.16

[5] Argeg, G. (2015). *The Problems of Translating Medical Terms from English into Arabic* [Doctoral dissertation, Durham University]. Retrieved from http://etheses.dur.ac.uk/11166/

[6]   Awang, R. & Salman, G. (2017). Translation and Arabicization Methods of English Scientific and Technical Terms into Arabic. *Arab World English Journal for Translation & Literary Studies*, *1*(2), 92-106 DOI: http://dx.doi.org/10.24093/awejtls/vol1no2.8

[7]   Aziz, Y. (1989). *A Contrastive Grammar of English and Arabic*. Ministry of Higher Education and Scientific Research, University of Mosul. Jordan Book Centre.

[8]   Baker, M. (1992) *In Other Words: a Coursebook on Translation*. London: Routledge.

[9]   Bell, R. T. (1991): *Translation and Translating. Theory and Practice*. London and New York: Longman.

[10]   Byrne, J. (2006). *Technical Translation: Usability Strategies for Translating Technical Documentation*. Dordrecht: Springer.

[11]   Cabré, M. and Sager, J., (1999). *John Benjamins Publishing Company*. Amsterdam: John Benjamins Publishing Company. https://doi.org/10.1075/tlrp.1

[12]   Catford, J. (1965). *A Linguistic Theory of Translation: An Essay on Applied Linguistics,* London: Oxford University Press.

[13]   Chambers, W. & R. (1992). The Chambers Dictionary. Chambers Harrap Publishers Ltd. Compact Oxford English Dictionary (2008). Oxford: Oxford University Press.

[14]   Chesterman, A. (1997). *Memes of Translation: The Spread of Ideas in Translation Theory*. Amsterdam: John Benjamins.

[15]   Farghal, M. (2009). Basic Issues in Translation Training with Special Reference to Arab Universities. *International Journal of Arabic-English Studies (IJAES)*, (*10*), 5- 24.

[16]   Ghazalla, H. (1995). *Translation as Problems and Solutions*. Valita: LGA Publication.

[17]   Gunther, G., & Tohmas, Z. (2012). *Studies in Generative Grammar [SGG] Discourse and Grammar*: From Sentence Types to Lexical Categories. De Gruyter Mouton USA, Munchen, DEU.

[18]   Hawkins, A. (1980). On Implicational and Distributional Universals of Word Order. *Journal of Linguistics*, *16* 193-235.

[19]   House, J. (1977). *A Model for Translation Quality Assessment,* Tübingen: Gunter Narr.

[20]   Jakobson, R. (1959). On Linguistic Aspects of Translation', in R. A. Brower (ed.) *On Translation (*pp. 232-39). Cambridge, MA: Harvard University Press.

[21]   Khalil, A. (2010). *A Contrastive Grammar of English & Arabic* (2 ed). Amman, Jordan: Jordan Book Centre.

[22]   Kingscott, G. (2002). *Technical Translation and Related Disciplines*. *Perspectives: Studies in Translatology*, *10* (4), 247-255. DOI: 10.1080/0907676X.2002.9961449

[23]   Leonardi, V. (2000). Equivalence in Translation: Between Myth and Reality. *Translation Journal, 4*, 7-14.

[24]   Newmark, P. (1988). *A Textbook of Translation*. New York: Prentice-Hall.

[25]   Nida, E. (1964). *Toward a Science of Translating*: *with Special Reference to Principles and Procedures Involved in Bible Translating.* Leiden: Brill.

[26]   Nord, C. (2018). *Translating as a Purposeful Activity: Functionalist Approaches Explained* (2nd ed). Milton Park, Abingdon, Oxon; New York: Routledge.

[27]   PACTE (2003). Building a translation competence model. In F. Alves (ed.) *Triangulating Translation: Perspective in Process Oriented Research*. Amsterdam: John Benjamins, 43-66.

[28]   Sa'eed, M., & Malalla, N. (2014). Some Problems of Translating Biochemical Texts from English into Arabic-A Critical Study. *Adab AL Rafidayn*, *44*(69), 213-226.

[29]   Saraireh, M. (2014). Common Practice Errors Related to Syntactic Structures in English-into-Arabic Translation. *Arab World English Journal*, *5*(2), 187 - 205.

[30]   Saraireh, M. (2001). Inconsistency in Technical Terminology: A Problem for Standardization in Arabic. *Babel*, *47*(1), 10-21.

[31]   Saraireh, M. (2014). Common Practice Errors Related to Syntactic Structures in English-into-Arabic Translation. *Arab World English Journal*, *5*(2), 187 - 205.

[32]   Sharkas, H. (2009). Translation Quality Assessment of Popular Science Articles. Corpus Study of the Scientific American and its Arabic Version. *Trans-kom*, *2*(1), 42-62.

[33]   Sieny, M. (1985). Scientific Terminology in the Arab World: Production, co-Ordination, and Dissemination. *Meta: Journal des Traducteurs/Meta: Translators' Journal*, *30* (2), 155-160.

[34]   Thieverge, B. (2002). *Translating scientific text: Practicalities and Pitfalls.* Retrieved on October 20, 2021, from http://www.councilscienceeditors.org/members/securedDocuments/v25n6p188.pdf

[35]   Yowell, Y.A. & Lataiwish, M.S. (2000). *Principles of Translation. Libia*: Dar Annahda Alarabiya

[36]   Venuti, L. (2000). *The Translation Studies Reader*. London: Routledge

[37]   Vinay, J., & Darbelnet, J. (1958/1995). *Comparative Stylistics of French and English: A Methodology of Translation*. Translated by Juan Sager & M.J. Hamel. Amsterdam/ Philadelphia: John Benjamins. [Cited in Almanna, A. (2016). The Routledge Course in Translation Annotation. New York: Routledge, Taylor & Francis].

[38]   Zohre Owji, M. (2013). *Translation Strategies: A Review and Comparison of Theories*. *Translation Journal, 17*(1), 1-12.1. https://translationjournal.net/journal/63theory.htm

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A Change in Saudi Attitudes From Use of Euphemism to Taboo: A Sociolinguistic Study

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Abstract—**For this paper, we studied the use of linguistic taboo words in Saudi Arabian society. Three main taboo topics were addressed in the current study: the use of taboo words in social contexts, the use of taboo sex words, and the use of taboo swear words. A randomly chosen sample of 253 Saudi females from two different age groups participated in the study. A closed-ended multiple-choice questionnaire was used to collect the data. The findings provided considerable insights into the behavior of Saudi society. Saudi society rarely uses taboo words. The strategy people use to avoid using taboo language is euphemism; sex topics, for instance, which may be overtly discussed in some cultures, are prohibited in Saudi culture. The findings also revealed that Saudi society is too sensitive to the use of swear words because they are culturally and religiously prohibited, though they were occasionally used by younger female participants. In general, this study showed that although the Saudi society is a conservative society, the younger generations of Saudi females are moving slowly toward making linguistic changes in society.**

Index Terms—**sociolinguistic, taboo, swear, social, context**

I. INTRODUCTION

Language has an effective impact on the lives of individuals and societies. In everyday life, people are used to speaking about their emotions and feelings. Some of the words they use may be appropriate, and others may not be. The use of words the society considers inappropriate or offensive is known as a taboo (Chu, 2009; Gao, 2013). Yule (2014) defined taboo words as words and phrases that people in society use inappropriately. Khursheed et al. (2013) stated that a taboo is the restricted use of words due to social constraints. They are words that violate cultural beliefs and religious norms. Linguistic taboos are culturally rule governed (Chu, 2009). Therefore, words that are considered taboo in one culture may not be considered taboo in another culture. Gao (2013) indicated that in the American culture, for instance, using the word "died" to refer to a person who passed away is considered taboo; instead, they use "pass away" or the more formal "answer the call of God" (p. 2311). Most commonly, speaking about taboos on love, marriage, and sex is prohibited in some societies (Murphy, 2010) because the topics may cause anxiety, embarrassment, or shame (Wardhaugh, 2010). Thus, in this study, the researchers intended to investigate Saudi females' use of taboo words, their attitudes, and the sociocultural factors affecting the use of those words, uncovering the differences between a younger age group and an older one. The sample we considered younger participants was aged 18–29 years, and the older participants were aged 30–59 years.

II. LITERATURE REVIEW

A. Euphemisms in Saudi Arabian Contexts

Saudi Arabia is currently undergoing great change. Naturally, this change is affecting people and their lifestyles. Studies on taboos in Saudi contexts are relatively rare. To the best of our knowledge, the paper by Alfaleh (2019) is the only one that has dealt with taboo words in Saudi society. Most studies have been conducted on euphemism and its strategies. Euphemisms are used to relieve and ease the harshness of taboo words (Gao, 2013). They are used when speakers want to make their speech more delicate and inoffensive. To do this, the speaker uses a roundabout word or expression so as not to violate social norms (Willis & Klammer, 1981). Saudis' use of euphemisms has recently attracted the attention of many researchers (Rabab'ah & Al-Qarni, 2012).

Al-Azzam et al. (2017) investigated the semantic and pragmatic functions of euphemisms in Saudi Arabia. The study revealed that cultural and social factors affect the Saudis' use of euphemisms in various situations that "reflect the clear structure of the values, beliefs, religion, customs, and the change of view toward certain circumstances" (Al-Azzam et al., 2017, p. 64). Moreover, Almoayidi (2018) investigated euphemisms mostly in Saudi Arabic. He examined death,

sex, body parts, and bodily functions. The Saudi participants preferred using euphemisms to avoid being impolite and too direct when talking about sensitive topics such as death, sex, body parts, and bodily functions.

Additionally, Rabab'ah and Al-Qarni (2012) investigated the use of euphemistic strategies and methods in Saudi Arabic and British English. The findings revealed differences and similarities between Arabic and English that might be caused by cultural values, customs, and religious beliefs. The Saudi participants provided numerous strategies of euphemism such as "part-for-whole, overstatement, understatement, deletion, metaphor, general-for-specific learned words, and jargons" (p. 730). The British participants employed understatement, deletion, learned words and jargon, metaphors, and general-for-specific words. The results revealed that gender did not prove to be an influential factor on the use and choice of euphemistic strategies. The Saudi and British participants were in favor of using taboo words when dealing with death and lying.

B. Topics of Linguistic Taboos

Societies encourage their members to follow certain procedures to encourage people to behave in acceptable ways. Rules established to direct and protect a society's values govern the way its people behave. Deviation from and violation of normal values may be considered taboo. Some taboo topics are common and shared among all societies; these are social, religious, and cultural taboos (Gao, 2013). Some taboo topics, such as swearing and sex, are related to specific cultures. Swearing is considered taboo in certain social contexts (Fägersten, 2012). Swearing or cursing is "using the bad language to express anger or disappointment and direct it to a certain person who is the object of anger" (Jay, 2000, p. 87). Swearing is being used more frequently to express anger and frustration (Jay & Janschewitz, 2008, p. 267). Using swear words might cause a person to be classified as an impolite. However, Peckham and Crystal (1986) said, "Swearing, whether mild or strong, makes an excellent relief mechanism. It actually helps to turn on the inanimate object that has hurt you and berate it verbally" (p. 34). Speaking about sex, for instance, using dirty words such as "shit," was most taboo in England 50 years ago. Nowadays, topics concerning death have become great taboos (Allan & Burridge, 2006); similar to this are words related to animals' names such as "cow" (Leech, 1966). Moreover, asking a woman her age is impolite in American culture; in contrast, talking about age and salary is permissible in Chinese culture (Gao, 2013).

Linguistically, the use of taboo words may have either positive or negative effects depending on the way it is employed. Psychologically, human beings tend to form their identities through their speech, and using taboo language is the most powerful and helpful way for them to reach this goal. People express themselves by manipulating language negatively, often using taboo words to hurt, embarrass, punish, or cause anxiety to other people. However, if it leads to a desirable consequence such as humor or relaxation, it may cause a kind of excitement (Jay, 2000). Social factors such as age, gender, religion, education, and class determine the acceptance of a word or its prohibition as taboo. Teenagers are believed to use swear words more than elderly people (Qanbar, 2011). Abdul Aziz et al. (2020) found that on the internet, swear words were used mostly in jokes by younger people to illustrate their sense of humor. To show gender differences in the use of taboo words, Lakoff (2004, p. 80) stated that men are creative in telling dirty jokes without caring about using euphemisms of language, whereas women are "experts at euphemism". Al-Abbas and Mohammed (2020, p. 405) reported that topics such as "religion, death, health, naming and addressing human body parts, swearing, and aging are stated as taboo in Arabic". The Arabic culture prohibits talking overtly about some body parts, because it is considered socially taboo.

C. Linguistic Taboos in Arab Countries

Linguistic taboos have been investigated only rarely in Arabic countries, by Arabic scholars as Al-Khatib (1995), Qanbar (2011), and Al Dilaimy and Omar (2018). Before the new millennium, studying taboos was considered an unhealthy job. It was done by Arabic researchers who studied in Europe and the United States and they brought the influence of Western culture back with them. When they returned to their home countries, they wrote on some serious topics concerning taboos to cope with the new developments in this world.

Al-Khatib (1995) studied the influence of sociocultural factors such as age, education, topic, and setting on the use of taboo words in Jordanian society. He explained the strategies of taboo words; how they are determined, what they are produced and developed for, how speakers can avoid taboo words, and how speakers use replacements for linguistic taboos. Al Dilaimy and Omar (2018) examined the use of taboo words in Iraqi Arabic. They found Iraqi males use taboo words extensively. They attributed the use of taboo words to different factors such as "the context of situation, educational and social status of speakers, age and sex of participants" (p. 10).

Qanbar (2011) studied how taboo words are used contextually in the Yemeni society. She classified them into two main categories: context-specific and general. In the context-specific category, she included words and expressions that become taboos in particular contexts but otherwise are not, for example, "cow," "pig," and "dog." In the general category, she classified taboo words into two subcategories: mentionable and unmentionable general. The mentionable general subcategory refers to words that have been euphemized in a polite setting. It includes "words and phrases that are considered taboos and shocking if mentioned unaccompanied with certain fixed conventional phrases" (Qanbar, 2011, p. 94). It includes words referring to unclean objects and places, metaphysical things, and admiration for things. The unmentionable general subcategory contains "absolute forbidden taboo words" (Qanbar, 2011, p. 92) and words prohibited religiously and socially, such as words that refer to private parts of the human body, words that refer to

political and historical symbols, the mention of a female person's first name in front of strangers or in public, and words that are used to condemn religious beliefs and symbols. The study concluded that Yemeni people avoid using taboo words and instead replace them with euphemistic expressions.

To the best of our knowledge, the only paper that has investigated taboo words in the Saudi community is of Alfaleh (2019). She provided a description of different expressions considered taboos linguistically, socially, and religiously that affect the beliefs and values of Saudi society. Alfaleh's data were based on her observations of the use of taboo words in Saudi society. Some of the topics discussed in this study included the "role of women gender [*sic*] in public activities including playing sports in public, driving in public or shaking a woman hand" (p. 10). Alfaleh concluded that the Saudis "are aligned with their religious and cultural beliefs that are responsible for contributing to taboo behavior and various expressions" (2019, p. 15–16).

Little has been published investigating the phenomenon of linguistic taboos in Saudi society in particular and by other scholars in Arab countries in general. This study shed light on a complicated issue in the conservative Saudi society. Because most of the previous studies were written on euphemism and its strategies, this study uncovered the linguistic behaviors of people toward the use of taboo words. Therefore, this study might contribute to an understanding of the sociocultural and linguistic behavior of Saudi society, and it will fill the gap in the literature on this topic.

III. RESEARCH QUESTIONS

This paper is aimed at providing a sociolinguistic analysis of taboo words as they are used in Saudi society. We investigated the linguistic taboos Saudis commonly use regarding their relationship to the social–cultural context. Additionally, due to the recent societal changes and the new technology to which people have been exposed (e.g., media, social networking), we investigated the attitudes and behaviors of Saudi society toward the use of taboo words, shedding lights on people's reasons for using them. By analyzing them, we attempted to construct a framework defining the Saudi identity as a conservative society from women's points of view on using taboo words because women are considered the leaders of change in any society. Thus, this study aimed to answer the following questions:

1. Do Saudi females use linguistic taboos? If yes, what are they?
2. What are their attitudes and behaviors toward the use of linguistic taboos?
3. Are the linguistic taboos younger females (18–29) use the same as those older females (30–59) use?

IV. METHODOLOGY

A. Participants

A sample of 253 Saudi females participated in this study. The participants were chosen randomly from King Khalid University (KKU) and comprised two age groups: younger (18–29) and older (30–59). They lived in the Southern part of Saudi Arabia, mainly in Abha and Khamis Mushayt. The participants had different educational backgrounds, such as BA, Master of Arts, and PhD students, employees, and teaching staff of KKU. The participants took part in this study voluntarily. They were clearly notified of the study's title, and a definition of the term "taboo" was provided in the questionnaire. Table 1 shows their age distribution.

TABLE 1
AGE DISTRIBUTION

Participants	Age Range	No. of Participants	Percentage
Younger Group	18–29 years old	191	75.5%
Older Group	30–59 years old	62	24.5%
		253	100%

B. Instruments and Procedure

Researchers use questionnaires to measure participants' attitudes in a way that provides valid results. To collect quantitative data, an online questionnaire was designed using Google Forms. It was written in English and Arabic to ensure the participants' full comprehension of each item on the questionnaire. Each item was a closed-ended multiple-choice question, and the questionnaire consisted of 30 items in addition to demographic data. The statements were designed to investigate the participants' use of taboo words with a 5-point Likert scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*) to obtain various responses. To determine the questionnaire's validity and reliability, we used Cronbach's alpha. The 30 items were shown to be consistent at ($\alpha = 0.73$).

The questionnaire consisted of two parts. The first part was designed to collect demographic data. The participants were asked to provide information about their ages and occupations. The second part was designed to collect data about the participants' use of taboo words in their social daily interactions. The 30 items of the second part were divided as follows: 18 items explored the participants' use of taboo words socially, four items involved sex and taboo expressions, and eight items concerned swear words. We developed the items on the participants' social use of taboo words. Items 1, 2, and 5 on swearing were adopted (with some modifications to match the statements on the questionnaire) from Kapoor (2016, p. 272), and we developed the other four items on sex (see Appendix A). We shared a link to the questionnaire

with the participants via email and WhatsApp and posted the link on the university's Blackboard platform. The participants spent about 10–15 min completing the questionnaire.

C. Data Analysis

To analyze the collected data, we used the descriptive–analytical approach. It is an effective method frequently utilized to collect and analyze data (Borg & Gall, 1989). The results were explained statistically using IBM SPSS Statistics (Version 24) to calculate frequencies and percentages for easy interpretation of the attitudinal differences between the two age groups—younger and older—regarding their use of taboo words. The data were analyzed at three levels: (a) taboo words used by the female participants in their everyday social lives, (b) taboo words related to sex, and (c) the use of taboo swear words. In accordance with the study's aim and research questions, we intended to identify the types of linguistic taboos most commonly used by Saudi society and the Saudi females' attitudes.

V. RESULTS AND DISCUSSION

A. The Use of Taboo Words in the Saudi Females' Social Lives

Table 2 shows the frequency and percentage of the younger and older groups' use of taboo words in their social lives. The younger and older participants' responses, generally speaking, to the statements showed that a large number of them deviated from using taboo words in their social lives.

TABLE 2
FREQUENCY AND PERCENTAGE OF THE USE OF TABOO WORDS IN SAUDI YOUNGER AND OLDER GROUPS' SOCIAL LIVES

Item	Frequency and percentage	Strongly agree/agree		Neutral		Strongly disagree/disagree	
		Younger group	Older group	Younger group	Older group	Younger group	Older group
1. I use taboo words a lot in public.	f	7	4	17	2	167	56
	%	4	7	9	3	87	90
2. I use taboo words with my friends and family members.	f	20	4	29	11	142	47
	%	11	6	15	18	74	76
3. I feel embarrassed when my mother's name is mentioned in front of others.	f	3	4	4	1	184	57
	%	2	6	2	2	96	92
4. I feel embarrassed when my name is mentioned in front of men.	f	14	8	17	4	160	50
	%	7	13	9	6	84	81
5. I call my friend names such as "dog" or "donkey" while joking.	f	61	8	43	13	87	41
	%	32	13	23	21	45	68
6. I refer to my husband as "he" or "him" in front of others.	f	33	13	68	14	90	35
	%	17	21	36	23	47	56
7. I do not feel embarrassed when I talk to others about my husband.	f	102	29	64	13	25	20
	%	53	47	34	21	13	32
8. It irritates me when someone asks me about my income.	f	90	43	54	10	47	9
	%	47	70	28	16	25	15
9. It is acceptable to call a divorced woman *mutalagah*.	f	37	7	34	12	120	43
	%	20	11	18	19	62	70
10. I feel embarrassed to refer to a single woman as a spinster.	f	114	41	24	3	53	18
	%	60	66	13	5	28	29
11. It is acceptable to call my maid *shagala* instead of "housekeeper."	f	43	23	47	13	101	26
	%	23	37	24	21	53	42
12. It is acceptable to call the lady who is cleaning in the college *farasha* instead of *khala* [aunt].	f	12	5	10	9	169	48
	%	6	8	5	15	89	77
13. It is acceptable to call someone who is overweight *matin* or *samiin*.	f	25	5	20	4	146	53
	%	13	8	10	6	77	86
14. When you have diarrhea, you express it explicitly to others.	f	26	7	33	13	132	42
	%	14	11	17	21	69	68
15. When you need to urinate, you express it explicitly.	f	59	5	29	13	103	44
	%	31	8	15	21	54	71
16. Opening the window is better than telling my friend that she smells bad.	f	138	55	39	4	14	3
	%	73	89	20	6	7	5
17. I prefer to use the expression *khabith* instead of "cancer."	f	33	14	69	17	89	31
	%	17	23	36	27	47	50
18. It embarrasses me to use the term "mentally retarded" in front of a disabled person.	F	148	46	18	3	24	13
	%	78	74	9	5	13	21

For Items 1 and 2, the younger and older participants were clear and direct in defining their attitudes toward the use of taboo words in public and with their families and friends. In Item 1, the majority of the younger participants (87%) and the older participants (90%) did not agree with using taboo words in public. Similar attitudes were obtained for Item 2: The majority of the younger participants (74%) and the older participants (76%) did not agree with using taboo words with their friends and family members.

Using females' names is considered taboo in Saudi society, and men feel embarrassed to mention the names of females in front of others. For Items 3 and 4, the younger and older participants were clear in showing their feelings about their mothers' names being mentioned in front of others or their own names being mentioned in front of men: 84% of the younger group and 81% of the older group expressed that they did not feel embarrassed when their names were mentioned in front of men, and 96% of the younger participants and 92% of the older participants did not feel embarrassed when their mothers' names were mentioned in front of others. These results were quite interesting and unexpected, showing that these usages were not considered taboo among the Saudi females. This result does not support

Qanbar's (2011) research in which the Yemeni participants considered the use of female names a major taboo in their society.

Saudi society prohibits calling a friend a "dog" or a "donkey," even while joking. The majority of participants, 45% of the younger group and 68% of the older group, expressed their refusal to call their friends animal names. However, 32% agreed they call their friends animal names, and 23% were neutral. This suggests using these taboo words is not common or accepted in Saudi society. Similar results were obtained with the older group, showing that 13% of them agreed they did this and 21% were neutral.

Saudi females are deeply conservative about their personal lives; they do not refer to their husbands by using the expression "my husband" in front of others but instead prefer to refer to their husbands as "he" or "him." This might be attributable to the separation between males and females in this society. However, for Item 6, 47% of the younger group and 56% of the older group disagreed with referring to their husbands as "he" or "him" in front of others. This shows that there has been a change in the society, and it is no longer considered a taboo, although 17% of the younger group and 21% of the older group agreed with referring to their husbands with the pronouns "he" and "him." However, 36% of the younger group and 23% of the older group were neutral. This suggests that a small number of the Saudi females were conservative. For Item (7), the majority of the younger group (53%) and the older group (47%) overtly expressed feelings of embarrassment when talking about their husbands to others. However, 34% and 21% of the two groups agreed that they talk about their husbands to others, and 13% and 32% were neutral. This again suggests that the Saudi society is still conservative and the younger generations are moving slowly toward change in this society.

Asking about someone's financial status is a topic that needs to be addressed. Thus, for Item 8, the percentages were high in both the younger and older groups (47% and 70%, respectively), demonstrating that they felt irritated when someone asked them about their incomes. Clearly, this is considered taboo in Saudi society.

A person's social status is an indicator of their position in a society. Using a title with a person's name in normal discourse puts them on the right social footing, depending on the culture. Referring to a woman as divorced, a spinster, an aunt, or a houseworker in a general context may be considered appropriate and may indicate a positive sense. However, when these words are used in specific contexts, they become taboo words. They may hurt the feelings of those people because they are meant to undermine and even ridicule them. Referring to a woman as *mutalagah* [divorced] in front of others or to a single woman as a spinster or calling a woman who works in houses *shagala* [housekeeper] or the lady who cleans in the college *farasha* [cleaner] instead of *khala* [aunt] underestimates their social status. Because people do so, the words have lost their general sense and have become taboo. It is a noticeable sign of devaluing and criticizing a person's social position.

For Items 9–12, the participants' responses were ultimately negative. For Item 9, 62% of the younger group and 70% of the older group refused to use "divorced" in front of the person to whom they were referring. However, 20% and 11% of the two groups agreed with its usage. Similarly, for Items 10 and 11, the majority of the two groups' responses—77% and 89%, respectively—did not agree with calling the woman working in the college "farasha" in Item 12 or the woman is working at a house "shagala" in Item 11. Instead, it seemed they preferred to call them "khala" [aunt] and "housekeeper," respectively. Using the word "spinster" to refer to a single woman in Saudi society seems to be increasingly less common. The participants showed embarrassment about using such a word. For Item 10, 60% of the younger group and 66% of the older group overtly displayed their feelings as being anxious and embarrassed about using taboo words in their social interactions with other people. This was in line with the work of Whaduragh (2010), who found that any topic that devalues the feelings of others might cause anxiety and embarrassment. In addition, the participants' attitudes toward the taboo word mentioned above provided some insights into Saudi female behaviors. It shows that Saudis' attitudes are in alignment with general social competence. They prefer to be more polite and sensitive. Their behaviors are a mirror of the sociocultural performance of the society in which they live. The results showed above were in line with our expectations. They indicated the participants had a positive attitude in relation to cultural values and their culture has a strong influence on their attitudes.

For Item 13, 77% of the younger group and 86% of the older group believed it was not acceptable to use the words *matin* [fat] or *samiin* [obese] to refer to an overweight person. Thus, the Saudi females believed it was taboo to use the words "matin" [fat] or "samiin" [obese] to refer to an overweight person. They avoided using words that caused pain to others, especially overweight people. As shown for Item 14, 69% of the younger group believed that it was taboo to express overtly to others that they had diarrhea, whereas 14% did not feel embarrassed to discuss such an issue with others, and 17% were neutral. In the older group, 68% thought that it was inappropriate to express overtly that they had diarrhea, whereas 21% were neutral, and 11% showed that they could express it overtly. The findings for this item show that the Saudi females regarded overtly discussing diarrhea with others as taboo. This finding supports the work of Rabab'ah and Al-Qarni (2012), who found that the Saudi and British participants in their study rarely used taboo words related to bodily functions such as the process of bodily excretion; thus, it is regarded as taboo.

A similar finding was obtained for Item 15, 54% of the younger group and 71% of the older group considered overtly expressing the need to urinate impolite and hence taboo. This result aligns with Enab's (2020) findings that the Egyptians used different expressions, specifically euphemistic phrases such as *θawānī wi gayy* [I will be right back].

Interestingly enough, for Item 16, the majority of both groups, 73% of the younger group and 89% of the older group, preferred to open a window rather than telling a friend that they smelled bad. The Saudi females considered it taboo to

express their discomfort to others.

For Item 17, 17% of the younger group agreed that they preferred to use the expression *khabith* [malignant] instead of the word "cancer," whereas 47% preferred to use the word "cancer," and 36% showed that to them it was neutral. However, 23% of the older group preferred to use the expression "khabith" instead of the word "cancer," whereas 50% preferred to use the word "cancer," and 27% showed it was neutral to them. The results of this item showed that the Saudi females preferred to use the exact scientific term directly rather than its euphemistic equivalent. Therefore, the Saudi participants did not consider the word "cancer" taboo, which was an interesting and unexpected finding. This result differs from that of Qanbar's (2011) study, showing people in Yemeni society introduce phrases such as *afana Allah* [May God cure us all] when they talk about serious diseases such as cancer. Thus, Yemeni people euphemize the word "cancer," but Saudis use the word directly because it is not classified as a taboo word in their culture. Our finding also differs from that of Enab's (2020) study, showing people who speak Egyptian Arabic avoid using the word "cancer" and euphemize it with expressions such as *ʔil-maraD (ʔ)il-wiHiʃ* [the bad disease].

For Item 18, 78% of the younger group thought it was impolite to use the term "mentally retarded" in front of a disabled person, whereas 13% could use it, and 9% showed it was neutral to them. As for the older group, 74% believed it was difficult to use such a term in front of a disabled person, 21% did not mind using it, and 5% were neutral. Thus, the Saudi females believed it was taboo to use the term "mentally retarded" in front of a disabled person. They avoided such a term because it caused psychological pain for the other person. This result goes along with that of Enab's (2020, p. 67–68) study, showing Egyptians use euphemistic expressions such as *ʕanduh Zurūf* [He has some issues] when referring to the mentally impaired.

B. The Use of Taboo Sex Words and the Saudi Females' Attitudes

The Saudi society is still a conservative society guided by religious norms and rituals. Hence, Islamic rituals greatly influence the use of social taboos. Table 3 summarizes the frequency and percentage of the use of taboo sex words among the two groups.

TABLE 3
THE FREQUENCY AND PERCENTAGE OF THE USE OF TABOO SEX WORDS IN SAUDI YOUNGER AND OLDER GROUPS

Item	Frequency and percentage	Strongly agree/agree		Neutral		Strongly disagree/ disagree	
		Younger group	Older Group	Younger group	Older group	Younger group	Older group
1. You feel embarrassed when you talk about sensitive parts of your body.	F	107	47	49	10	35	5
	%	56	76	25	16	18	8
2. You feel embarrassed when someone else talks about sensitive parts of your body.	F	143	54	29	4	19	4
	%	75	88	15	6	10	6
3. It is normal to use dirty words such as "fuck" or "ass."	F	28	6	28	6	135	50
	%	14	10	14	10	72	80
4. It is normal to speak about sex among friends.	f	35	2	35	12	121	48
	%	18	3	18	19	64	78

As shown in Table 3, the participants' responses to the statements were high in percentage. For Item 1, the female participants were clear in expressing their attitudes. They positively agreed that they felt embarrassed when talking about sensitive parts of their body among themselves or in front of the others. In Saudi society, it is taboo to talk about females' body parts. Of the younger group, 56% agreed that they felt anxious about such a thing, whereas 18% disagreed, and 25% showed it was neutral to them. In contrast, the older group firmly made their feelings clear. To them, it was taboo to deal with this topic: 76% agreed it was definitely prohibited, 8% disagreed, and 16% were neutral. This goes along with the findings of Qanbar's (2011) study, which showed it is taboo to talk about sensitive parts of one's body, and with Wardhaugh's (2010) findings that taboo sex words may cause anxiety, embarrassment, or shame.

Similarly, for Item 2, the participants were asked whether they felt embarrassed when someone else talked about sensitive parts of their bodies. The majority of the two groups agreed. For Item 3, the participants' responses were high in percentage. Both the younger and the older female groups responded negatively: 72% and 80%, respectively, showed their disagreement. For Item 4, the participants' responses to this item were high in percentage. The agreement between both groups showed that there was cause for not appreciating the use of taboo sex words in their daily interactions: 64% of the younger Saudi female participants disagreed, and 78% of the older group responded negatively about using taboo sex words with their friends.

Based on the above results, there are two ways of analyzing linguistic sex taboos in Saudi culture; the first is general, and the second is specific. The general taboos are related to topics that are forbidden socially and their usage is absolutely prohibited. The participants were asked general attitudinal questions about taboo sex words to determine their reactions to using these words. The participants' responses showed that they refused to use sex words in their speech, specifically, "ass" or "fuck," which ultimately are not part of their culture; their responses showed that they

responded negatively to the use of these two terms. We introduced these two words to explore the reactions of the two groups and whether the participants had been affected by the new lifestyle of the Saudis nowadays. Their responses revealed that their sociocultural background affected their attitudes. People with different cultural backgrounds previously would not deal with the same issue in exactly the same way (Gao, 2013). To the Saudi female participants, talking about sex among friends was forbidden, and that was shown in their responses. Talking about sexual intercourse is regarded rude in public (Al-Azzam et al., 2017). Because talking about sex overtly was prohibited according to their societal beliefs and values, the Saudi female participants avoided using sex words and expressions. This indicated they were socially conservative because of the cultural values and religious norms governing their lives. This aligns with the results indicated by Gao (2013), who asserted that talking about "sexual intercourse is to be avoided in polite conversation" (p. 2311).

C. The Use of Taboo Swear Words and the Saudi Females' Attitudes

Swear words are considered taboo language (Fägersten, 2012). The severity of the swear words differs from one society to another. As stated above, swearing is used mostly to express anger, frustration, and disappointment (Jay & Janschewitz, 2008). The Saudi society is conservative and is committed to Islamic rules. Thus, Islamic rituals greatly influence the use of taboo swear words. Table 4 shows the Saudi female participants' attitudes toward using swear words.

TABLE 4
THE FREQUENCY AND PERCENTAGE OF USING SWEAR WORDS IN SAUDI YOUNGER AND OLDER GROUPS

	Frequency and percentage	Strongly agree/agree		Neutral		Strongly disagree/ disagree	
		Younger group	Older Group	Younger group	Older group	Younger group	Older group
1. While drinking some soup with my friend, I feel embarrassed to say, "Oh, fuck! I burnt my tongue!"	*f*	41	7	38	7	112	48
	%	21	11	20	11	59	78
2. I feel embarrassed to say to my colleague, "I think this is bullshit. You will have to redo the report."	*f*	65	21	50	17	76	24
	%	34	34	26	27	40	39
3. I feel embarrassed to say to my colleague, "Who is the idiot who ate my sandwich?"	*f*	65	29	47	4	79	29
	%	34	47	25	6	41	47
4. It is normal to say to a friend, who made a suggestion, "Come on; don't be stupid. How can I possibly quit my job?"	*f*	64	10	51	10	76	42
	%	33	16	27	16	40	68
5. I feel embarrassed to say to my friend—while talking about another friend—"Shit! I've forgotten to phone her."	*f*	66	27	48	11	77	24
	%	35	43	25	18	40	39
6. I always swear to make others believe me.	*f*	23	7	34	17	134	38
	%	12	11	18	27	70	62
7. I swear when I want to express strong feelings.	*f*	104	39	51	11	36	12
	%	54	63	27	18	19	19
8. I would say it is generally frowned upon to swear at work.	*f*	39	26	55	18	97	18
	%	20	42	29	29	51	29

As shown for Item 1, 21% of the younger group used the swear word "fuck" with their friends, whereas 59% did not use it, and 20% showed it was neutral to them. As for the older group, only 11% used the swear word "fuck" with their friends, 78% did not, and 11% were neutral. This result indicated that the Saudi females did not use the swear word "fuck" with friends, and they were firm in making it clear that to swear using such a word was taboo. The cultural and religious norms of their society may condition this belief. This result differs from that of Kapoor's (2016) study, which manipulated a moderate swear ("Oh, fuck") in a casual context.

For Item 2, 34% of the younger group felt embarrassed to use the swear word "bullshit" with their colleagues, whereas 40% did not (they could use it), and 26% showed it was neutral to them. As for the older group, 34% felt embarrassed to use the swear word "bullshit" with their colleagues, 39% did not (they could use it), and 27% were neutral. The percentages of those who avoided using it were identical for both age groups (34%) and almost identical for those who could use it (40% of the younger group and 39% of the older group). The results for this item indicated that the Saudi female participants—to some extent—use the swear word "bullshit" with their colleagues.

For Item 3, 34% of the younger group felt embarrassed to use the swear word "idiot," whereas 41% did not, and 25% showed it was neutral to them. As for the older group, 47% felt embarrassed to swear using such an expression with colleagues, whereas 47% did not—an identical percentage; however, 6% showed it was neutral to them. The result for this item was not clear-cut. There was no significant difference between those who used the word "idiot" and those who

did not among the older group, but the younger group used it a little more. In this case, we inferred that they used it to some extent. For Item 4, 33% of the younger group used the swear word "stupid" with their friends, whereas 40% did not, and 27% showed it was neutral to them. As for the older group, only 16% used the swear word "stupid" with their friends, 68% did not, and 16% were neutral. The result of this item indicated that the Saudi females did not use the swear word "stupid" with their friends, specifically the older group, who indicated it strongly (68%). This means the usage of such a word is taboo in Saudi society, specifically among older people.

For Item 5, 35% of the younger group felt embarrassed to use the swear word "shit" with their friends, whereas 40% did not, and, 25% showed it was neutral to them. As for the older group, 43% felt embarrassed to use the swear word "shit" with their friends, 39% did not, and 18% were neutral. The result of this item indicated that there was no significant difference between those who used the word "shit" and those who did not, but the younger group used it a little more. This differs from Baudin and Paramasivam's (2014) results, which showed that Malaysian female teenagers swear regularly, using their favorite swear words "shit," "damn," and "hell" followed by "bitch," "fuck," and "bullshit." For Item 6, only 12% of the younger group said they swear to make others believe them, whereas 70% did not, and 18% showed it was neutral to them. As for the older group, only 11% said they swear to make others believe them, 62% did not, and 27% were neutral. The result of this item showed that the Saudi females did not swear to make others believe them. Both the younger and older groups announced this firmly (70% and 62% respectively). An interesting result was that the percentage of the younger females—who did not swear—was higher than that of the older females, which was unexpected.

For Item 7, 54% of the younger group could swear to express strong feelings, whereas 19% did not, and 27% showed it was neutral to them. As for the older group, 63% could swear to express strong feelings, 19% did not, and 18% were neutral. This result indicated that the Saudi females could swear to express strong feelings. It may be connected with formal situations to finalize critical issues. Finally, for Item 8, 20% of the younger group felt embarrassed to swear at work, whereas 51% did not, and 29% showed it was neutral to them. As for the older group, 42% felt embarrassed to swear at work, 29% did not (they could swear at work), and 29% were neutral. This result indicated that the older Saudi females believed swearing at work was taboo, but the younger females could swear at work.

VI. CONCLUSION

In conclusion, this study essentially uncovers the concept of taboo words in the Saudi society. As shown, Saudis are in favor of using euphemisms rather than taboo words, a strategy speakers use when they adjust their words and expressions to articulate unpleasant, uncomfortable, or embarrassing emotions or ideas. The degree of using taboo words differs from one group to another, revealing the social and cultural attitudes of Saudi society as a whole. The responses show complete disagreement among Saudis on the use of sex words in their daily interactions. Swearing also is culturally and religiously prohibited.

APPENDIX

Dear participants,

The researchers are conducting a research paper on "A Sociolinguistic Study of the Linguistic Taboos in Saudi Arabia". So, you are kindly requested to respond to the items of the questionnaire.

Taboo language means the words and expressions that people avoid to use because they are not acceptable religiously, socially and morally.

Part 1. Demographic information (Required)

Age   (18–29)   (30–59)

Occupation

Part 2

Please respond to the questionnaire items by choosing one of the alternatives:

Strongly agree = 1   Agree = 2   Neutral = 3   Disagree= 4   Strongly disagree = 5

Item
I use taboo words a lot in public.
I use taboo words with my friend and family members.
I feel embarrassed when my mother's name is mentioned in front of others.
I feel embarrassed when my name is mentioned in front of men.
I call my friend names such as "dog" or "donkey" while joking.
I refer to my husband as "he" or "him" in front of others.
I do not feel embarrassed when I talk to others about my husband.
It irritates me when someone asks me about my income.
It is acceptable to call a divorced woman *mutalagah*.
I feel embarrassed to refer to a single woman as a spinster.
It is acceptable to call my maid *shagala* instead of "housekeeper."
It is acceptable to call the lady who is cleaning in the college *farasha* instead of *khala* [aunt].
It is acceptable to call someone who is overweight *matin* or *samiin*.
When you have diarrhea, you express it explicitly to others.
When you need to urinate, you express it explicitly.
Opening the window is better than telling my friend that she smells bad.
I prefer to use the expression *khabith* instead of "cancer."
It embarrasses me to use the term "mentally retarded" in front of a disabled person.
You feel embarrassed when you talk about sensitive parts of your body.
You feel embarrassed when someone else talks about sensitive parts of your body.
It is normal to use dirty words such as "fuck" or "ass."
It is normal to speak about sex among friends.
While drinking some soup with my friend, I feel embarrassed to say, "Oh, fuck! I burnt my tongue!"
I feel embarrassed to say to my colleague, "I think this is bullshit. You will have to redo the report."
I feel embarrassed to say to my colleague, "Who is the idiot who ate my sandwich?"
It is normal to say to a friend, who made a suggestion, "Come on; don't be stupid. How can I possibly quit my job?"
I feel embarrassed to say to my friend—while talking about another friend—"Shit! I've forgotten to phone her."
I always swear to make others believe me.
I swear when I want to express strong feelings.
I would say it is generally frowned upon to swear at work.

REFERENCES

[1]   Abdul Aziz, Z., Yusuf, Y. Q., Burhansyah, B., & Muzammil, M. (2020). To say or not to say? Construing contextual taboo words used by Chinese speakers in Indonesia. *Journal of Ethnology and Folkloristics, 14*(2), 83–98.

[2]   Al-Abbas, J. A. & Mohammed, L. N. (2020). Problems in Arabic translation of taboo language in American daily press. *Journal of Al-Frahedis Arts, 12*(42), 399–411.

[3]   Al-Azzam, B., Al-Ahaydib, M., Alkhowaiter, N., & Al-Momani, H. (2017). Social and cultural euphemism in Saudi Arabic: A semantic, a pragmatic and a sociolinguistic analysis. *Advances in Language and Literary Studies, 8*(2), 64–69.

[4]   Al Dilaimy, H., & Omar, Z. K. (2018). Sociolinguistic Study of taboos in Iraqi Arabic. *The Ninth International Scientific Conference,* Al Maarif University College, Anbar, Iraq.

[5]   Alfaleh, S. A. (2019). Cultural and societal beliefs and taboos in Saudi Arabia. *International Journal of Humanities and Cultural Studies, 5*(4), 9–18.

[6]   Al-Khatib, M. (1995). Sociolinguistic view of linguistic taboo in Jordanian Arabic *Journal of Multilingual and Multicultural Development, 16*(6), 443–457.

[7]   Almoayidi, K. (2018). Euphemism as a communicative tool: A descriptive study of Hijazi and southern region dialects spoken in Saudi Arabia. *Open Journal of Modern Linguistics, 8*(1), 1–8.

[8]   Allan, K., & Burridge, K. (2006), *Forbidden words: Taboo and the censoring of language.* Cambridge: Cambridge University Press.

[9]   Baudin, N., & Paramasivam, S. (2014). Swearing in English among a group of female Malaysian teenagers. *International Journal of Contemporary Applied Sciences 1*(3), 14–25.

[10] Bayoumi, M. (2017). *When she rhetorically swears in Arabic: A sociolinguistic approach to women swearing in a university speech community.* Master's thesis, the American University in Cairo.

[11] Borg, W. R., & Gall, M. D. (1989). *Educational research: An introduction.* White Plains, NY: Longman

[12] Chu, M. (2009). Chinese cultural taboos that affect their language and behaviour choices. *Asian cultural history, 1*(2), 122–139.

[13] Enab, N. (2020). *Euphemistic expressions and strategies used by Egyptian speakers of Arabic in light of face theory*. Master's thesis, the American University in Cairo.

[14] Fägersten, K B. (2012). *Who's swearing now? The social aspects of conversational swearing.* New York, NY: Cambridge Scholars Publishing.

[15] Gao, C. (2013). A sociolinguistic study of English taboo language. *Theory and Practice in Language Studies, 3*(12), 2310–2314.

[16] Jay, T. (2000). *Why we curse*. Philadelphia, PA: John Benjamins.

[17] Jay, T. & Janschewitz, K. (2008). The pragmatics of swearing. *Journal of Politeness Research 4*(2), 267–288.

[18] Kapoor, H. (2016). Swears in context: The difference between casual and abusive swearing. *Journal of Psycholinguistic Research, 45*(2), 259–274.

[19] Khursheed, A., Ghani, M., Alam, M., & Gul, T. (2013). A sociolinguistic study of the linguistic taboos in the Pashtoon society. *International Researcher, 2*(1), 36–41.

[20] Lakoff, R. (2004). *Language and woman's place*. Oxford University Press.

[21] Leech, G. (1966). *English in advertising*. London: Longman.

[22] Murphy, B. (2010). *Corpus and sociolinguistics: Investigating age and gender in female talk.* Amsterdam and Philadelphia: John Benjamins.

[23] Peckham, S. & Crystal, D. (1986). Taboo or not taboo. *English Today, 2*(3), 34–35.

[24] Qanbar, N. (2011). A Sociolinguistic study of the linguistic taboos in the Yemeni society. *Modern Journal of Applied Linguistics, 3*(2), 86–104.

[25] Rabab'ah, G, & Al-Qarni, A. M. (2012). Euphemism in Saudi Arabic and British English. *Journal of Pragmatics, 44*(6-7), 730–743.

[26] Wardhaugh, R. (2010). *An introduction to sociolinguistics*. Sixth Edition. Blackwell Textbooks in Linguistics: Wiley-Blackwell.

[27] Willis, H., & Klammer, E., (1981). *A brief handbook of English*. Holt, Rinehart and Winston, New York.

[28] Yule, G. (2014). *The study of language*. Fifth edition. United Kingdom: Bell and Bain Ltd.

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A Didactic Strategy to Favor the Development of Oral Expression in Students at UEES and ECOTEC Universities

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Abstract—**The research attempts to solve some of the limitations students present in their oral expression in the university context, which causes scientific and academic production difficulties. An exhaustive bibliography related to the subject was consulted for its realization, and different instruments were applied. The use of theoretical methods and methodological background support the research. Furthermore, interviews and surveys were used to diagnose the current state of the development of oral expression in university students from UEES and ECOTEC. The results allowed the development of a set of activities to promote the development of the oral expression of these students. Additionally, based on the criteria offered by the discussion groups and experts, it was possible to verify the proposed strategies' effectiveness in educational practice. Oral communication appears as a necessary instrument for establishing relationships between man and the environment where he lives. Thus, it plays an essential role in forming and developing people's academic lives.**

Index Terms—**linguistics, oral communication, research, teaching-learning processes**

I. INTRODUCTION

As a result of oral expression, students can make assessments and present their points of view. In addition, it is evidence of the cultural level that the individual possesses. Those arguments lead researchers to ensure oral expression could be developed as one of the teaching skills to be addressed in universities. However, from the didactic point of view, oral expression becomes one of the components of the language that needs more attention and, given its level of complexity, there are difficulties in its development on the part of the students.

One of the main aspirations of educational work in Ecuador is to form individuals who possess communicative competence, capable of transmitting their ideas appropriately, unambiguous, and concise. These arguments indicate the fundamental place that oral expression skills occupy in a Research Methodology class at the university level.

This research focuses its study in the Faculty of Marketing and Communication at ECOTEC University and the Master's Degree in Educational Management at UEES. From a population of 2000 students, we selected 200 students from the two universities who are enrolled in the Research Methodology subject.

There are still severe contradictions between the level of integration demanded by education and the actual preparation that students receive since they cannot always incorporate and systematize linguistic and research knowledge in practice.

The bibliographic inquiry and the theoretical systematization carried out by this research lead us to affirm that the ability of oral expression constitutes an object of study that has not been sufficiently studied from the didactic, pedagogical, and methodological point of view. However, the contributions of García-Alzola (1975), Román-Escobar (2012), Cassany et al. (1994), Ruiz-Iglesias (1999), Ferrer-Díaz (2003), who have developed theoretical-practical proposals aimed at developing the skill, were found and assumed. Furthermore, these authors have presented critical analyses related to the theoretical assumptions supporting the studied process.

At present, the teaching of oral expression is an essential link to achieve the levels of knowledge required by the university of the XXI century. However, through observations, surveys, and interviews with students in the field of Research Methodology, we found inadequacies in teaching this skill, which leads to limitations in developing students' logical thinking and other skills they must possess for academic and scientific production.

Teaching the oral language is subject to didactic requirements for its development; therefore, the teacher has to teach the students to be increasingly competent in their communication without prioritizing accuracy over fluency. Sometimes, students only manage to reproduce information without orally giving their points of view.

After applying different research instruments (surveys, interviews, analysis of normative documents, observations, among others), and the experience as teachers at UEES and ECOTEC, we can state that there are insufficiencies in the treatment of the oral communication skill. The most significant limitations are:

- Students show limited expressiveness and fluency when exposing their ideas, given by their lack of vocabulary.
- They show insecurity in presenting their ideas.
- The subject Research Methodology does not systematically prepare students to develop oral expression skills.
- Teachers do not take sufficient advantage of the scientific material developed at the university to develop oral expression in students. The spaces used to develop oral expression are limited in both curricular and extracurricular.
- Insufficient activities in which conversation, oral presentations of research papers, dialogue, and debate among students are promoted.

The results obtained in this diagnostic study indicated the relevance of investigating this matter. There is a need to pay special attention to developing oral communication skills. Therefore, the following scientific problem is presented: How to favor the development of oral expression in the teaching-learning process of the UEES and ECOTEC Research Methodology class?

This research aims to elaborate didactic strategies to favor the development of oral expression in the Research Methodology classes at UEES and ECOTEC. The current situation led to the formulation of the following scientific questions:

1. What theoretical assumptions support the development of oral expression skills?
2. What potential does the Research Methodology program offer for developing oral expression?
3. What is the current situation of oral expression with the Research Methodology students?
4. What didactic strategies can be designed to contribute to the development of oral expression in university students of the Research Methodology class?

The following scientific tasks were drawn to meet the objective of the research:

1. Systematization of the theoretical foundations that support the development of oral expression in the university context.
2. Diagnosis of the current state of oral expression in students studying Research Methodology at UEES and ECOTEC.
3. Elaboration of didactic strategies to contribute to the development of oral expression in university students from Research Methodology.

The methods and techniques used in this research were the analytical-synthetic, which was used to analyze the diagnosis, and the processing of data to systematize the necessary theoretical foundations about the development of oral expression. The historical-logical analysis was used to reveal the background of the teaching of oral communication and systematize the theoretical foundations that support it, which made it possible to reach meaningful conclusions. Observations were used to specify the diagnosis of the mode of action of teachers and students in the development of oral expression. Interviews and surveys of students and teachers contributed to knowing the conception of oral expression. The analysis of documents encourages the revision of the methodological orientations of the subject. Descriptive statistics were used to present the information collected concerning the development of oral expression, and inferential statistics were used to interpret the results obtained from the diagnosis and its assessment.

II. LITERATURE REVIEW

A. Theoretical and Methodological Foundations that Support the Development of Oral Expression as a Skill

This scientific article analyzes the theoretical and methodological foundations that support oral expression as a skill from the bibliography consulted.

B. Communication Skills: Speaking.

Communication reflects people's need for association and cooperation. It is also a condition for developing individuality, originality, and integrity. Several authors advocate that the teacher possesses skills for the communicative process: Petrovsky (1985) proposes skills related to information, mobilization, orientation, and development. In addition, he refers to skills to organize and direct communication between students. Those competencies are related to the development of oral and written communication of students. Ortiz (2020) proposes the skills for expression, observation, and empathic relationships between teachers and students.

It is expected that the student learns to take notes, to elaborate content sheets, concept maps, summarize information, express their ideas orally, and present reports; as well as make oral presentations about the knowledge acquired in their Research Methodology subject so that it can also be linked to the development of research skills. The class aims to stimulate oral and written communication; this involves producing and receiving information. Production is done by speaking and writing, and reception by listening and reading. These skills should not be treated separately.

According to Rodríguez (2006), to achieve the development of communicative skills, speaking and writing must go through three stages that cannot be altered:
- Acquisition of ways of expression (Knowledge of operations).
- Understanding of the ways of expression (Mastery of operations).
- Sufficient, varied, and creative expression. (Systematization).

These stages are critical, but they are not exclusive because they are necessary to achieve motivation, efficient understanding of expression, and frequent practice. Oral and written expressions have been the subject of multiple studies from different perspectives. When directing the teaching-learning process, students must receive adequate didactic treatment, independently, according to their needs, taking into account the relationship between expression and communication.

C. Oral Expression as a Skill in Teaching Activity

The purpose of a university is to help students express their ideas and knowledge. On the other hand, the skills correspond to the know-how and are achieved by powerfully expressing themselves. This can lead to the transformation of their environment, from the classroom and the rest of the activities in the institution or outside.

To refer to oral expression, it is first necessary to specify what is meant by skill. Many authors have defined the term. González (2001) states that "skills constitute the domain of operations that allow a rational regulation of activity." Álvarez (1999) defines skill "as the dimension of content that shows people's behavior in a branch of knowledge proper to the culture of humanity. It is the system of actions and operations dominated by the subject responding to a goal." For Zilberstein (2005), skill implies mastery of cognitive, practical, and evaluative forms; that is, the knowledge in action. Salazar (2002), Chernousova (2008), Núñez (2013), Hidalgo (2013), and Ortiz (2020); all these works are evidence of how much progress has been made in this field. The theoretical positions provided allow us to assume the dialectical unity between thought and language, among other vital issues.

Therefore, the usefulness of the studies carried out is recognized; however, it is considered that they are not sufficient to conceive the work with oral expression aimed at enhancing its development in students. For the authors of this scientific article, teachers must know the actions and operations that the student must perform to comply with the scientific direction of the teaching-learning process. Therefore, Zilberstein's (2005) conception is assumed where skill is seen as the student's ability to express their ideas and criteria orally in social and academic life.

Oral expression is a socio-linguistic process to transmit information and is highly dependent on the situational context. It is based on other significant means: inflections, modulations of the voice, face and body expressions, which allow the transmission and reception of the message (Ferrer-Díaz, 2003). García-Alzola (1975) refers to the general aspects of oral expression, emphasizing its structural aspect. Román-Escobar (2012) talks about developing coherent language as a school task. These works are sources of obligatory consultation when it is intended to develop communicative skills in oral expression.

Oral expression is one of the most frequent problems in Research Methodology classes. For years, inadequacies in pedagogical research have led teachers to employ their intuition or professional experience to promote and develop oral skills in Research Methodology classes. Precisely, the limitations in the studies on the subject impose the need for its deepening, given the difficulties that the deficient use of the language produces in the students who daily are involved in fundamental interactions in a given social or academic environment. Nevertheless, according to Ferrer-Díaz (2003), "... it has not yet been possible to reach results that allow scientific support for the didactic procedures that promote the development of this skill."

Báez (2006) assumes that "in oral expression, thought and word are aimed at achieving one or more objectives, which vary according to the nature of the subject and the circumstances in which they occur, with a predominance of referential and persuasive functions." Thus, it consists of a series of micro-skills, such as knowing how to provide information and opinions, show agreement or disagreement, resolve conversational failures or know in which circumstances it is pertinent to speak and in which it is not. It integrates the formal aspects of the language, that is, the linguistic resources that facilitate communication, with pragmatic and socio-cultural factors, which have a lot to do with the universe of the speaker's knowledge, with their culture, which allows a better adaptation to the context of interaction according to the intention and communicative purpose.

To be good communicators, speakers and listeners must decode gestures, mimicry, intonation, the use of hyperboles, unfinished phrases, repetitions, onomatopoeias, among others. Numerous activities can be carried out to give a didactic treatment to this type of communication in the Research Methodology class, but the most used are the didactic conversation and the formulation of questions and answers. It is necessary to ensure that the student dominates the subject thoroughly. The questions must be formulated with precision. Real communication situations could be more motivating for students and favor the development of this critical skill.

Another aspect is the ability to listen carefully. It is crucial to train the student in listening to understand what is being said and respond or intervene better. According to Román-Escobar (2012), the oral language must have a "priority character" since it supports written communication. Therefore, it is necessary to devote special attention to oral language exercises since this allows the student to become familiar with the subject, organize their ideas, and enrich subject concepts. For these reasons, teaching oral expression requires teachers to create meaningful contexts for learning by placing students in complex situations that lead them to produce texts.

The receiver must patiently wait for the speakers to present their ideas without showing impatience for proper communication. In this case, the teachers of Research Methodology must consider that each student communicates their ideas by sharing their experiences, beliefs, and other factors related to their socio-cultural context. Thus, current studies in discourse and pragmatics allow students to become efficient, creative, and critical language users and develop a linguistic awareness that allows them to express themselves coherently and transparently.

When the oral language is taught, according to Garc á-Alzola (1975), three general aspects of oral expression must be taken into care: phonic, lexical, and structural. Phonic comprises the pronunciation, intonation, and intensity of the voice. Lexicon refers to words; the activities aim to enrich students' active vocabulary. Among the errors made in this sense is accentuation, grammatical, and idiomatic. Finally, the structural aspect refers both to the organization of thought and to the general structure of its expression. Among the most frequent errors are twisted, incomplete, imprecise sentences, verb concordance with a subject, incorrect use of prepositions, and some forms of personal pronouns.

The authors of this research propose new indicators that the teachers of Research Methodology should take into account and consider to evaluate oral expression.

1. Adequacy of ideas: Oral interventions will consider adjusting to the topic in question and the ideas' sufficiency and quality.

2. Pronunciation: the correct articulation of the different phonemes and the accentuation of the words when pronouncing them (diction, articulation, intonation, speed) will be measured.

3. Lexical precision: The correctness and precision, that is, that the precise words are used according to their meaning to express the ideas.

4. Coherence and cohesion: Coherence is fundamentally semantic. A text is coherent when each of the units that make it up can be interpreted concerning the meaning of the whole text. Cohesion is the correct use of conjunctions, prepositions, and contextual references.

5. Fluency: Pauses, silences, repetitions, and clarity, avoiding imprecision and ambiguity.

Garc á-Alzola (1975) alludes to two dimensions to be taken into account in oral expression: content and form.

Content indicators:
- Mastery of the theme
- Correspondence between speech and topic
- Quality of ideas
- Parts of the discourse: introduction, development, conclusions
- Communicative intention

Indicators of the form:
- Phonic
- Morphosyntactic
- Semantic

In the teaching activity, difficulties are frequently presented that threaten students' adequate development of oral expression. Among the causes is the low participation of students in the programmed activities, insufficient feedback from teachers, and lack of the accurate diagnosis of the students to draw strategies from their difficulties.

The essential qualities, which should not be missing in the elocution or the style of each one when speaking are:
- Clarity, by which we communicate our thoughts to others
- The use of our voices to express our ideas
- Naturalness
- Expressiveness to give words and phrases the strength and intonation appropriate to the content

To properly communicate ideas, people must be careful with the transmitted content. Listening is also critical to comprehend the speaker's message. The word listening means hearing with attention and paying attention to what another person says. Hearing refers to the physical reception of sound waves through the ear. On the other hand, listening includes receiving and using the information captured through the ear canal.

Listening comprehension and oral language are closely related as they have many aspects in common. Therefore, it is necessary to develop listening to achieve an adequate development of oral expression. Indeed, attentional listening is used very frequently in the classroom to listen to orders, instructions, and messages. On the other hand, analytical listening is when the listener analyzes the message to answer or solve some questions. Therefore, teachers in the Research Methodology classes must teach their students the following:
- Keep silent.
- Respect the words and ideas of others.
- Analyze what others say.
- Know how to ask questions.
- If they want to say something, they should wait for their turn.
- Do not shout.
- Do not make exaggerated gestures while others speak.

Those elements become essential guidelines for modeling activities to develop oral expression in the teaching-learning process in the Research Methodology classes.

D. Forms of Oral Expression

Today's life demands a very high level of oral communication. Romáu-Escobar (2012) presents two forms of oral expression: spontaneous and directed. The first favors the rapid exchange of ideas between people to attract attention, narrate events, argue, and express feelings, desires, moods, or problems. On the other hand, the directed is conscious and must have exceptional attention from educational institutions.

The oral expression reflects geographical and social varieties, which reveal the origin and culture of the speaker. Sometimes discourse is poorly elaborated, for instance:

  1. Momentary interruptions, repetitions, inconsistencies, and ramblings.
  2. The generic use of certain verbs.
  3. Words that are repeated by habit: well, eh, right?, do you know what I mean?
  4. Exclamative and interrogative expressions.
  5. Linguistic inaccuracies, such as eliminating certain sounds or words.
  6. Unfinished sentences.
  7. Colloquial metaphors.
  8. Diminutive or augmentative suffixes.
  9. Expressions to show conformity, disagreement, and anger.

On the other hand, the discussion develops students' analysis, synthesis, induction, deduction, and generalization skills. It requires learning to listen carefully to what each one raises, not to be exalted in the heat of the discussion, and not to interrupt others.

E. Reflective or Directed Speaking

The primary function of thoughtful oral expression is to persuade the listener. Its structure is more elaborated than spontaneous oral expression. The vocabulary is broader and varied. Efforts are made to avoid linguistic inaccuracies. Multiple activities can be carried out to give a didactic treatment to this type of communication in the class, but the most used are the didactic conversation and the formulation of questions and answers. Students' responses to well-formulated questions are the most widespread form of speaking. Nevertheless, students must learn to lead the interlocutor towards the desired path.

Many values can be attributed to the conversation as a procedure for learning the oral language:

- It enriches the student's vocabulary.
- It allows deepening in the subject of the class.
- It stimulates students' abilities to observe and think while offering the teacher the possibility of guiding students in the methods and techniques of research and reasoning so that students can discover the answers to their questions and the problems posed by the class.
- It forces students to direct their thoughts to the general progress of the conversation.
- It allows for correcting the defective forms of expression, either by the students themselves or by the careful observations of teachers.

Teachers must be prudent when correcting the student and adapt to each individual's characteristics. In addition, teachers must master the speaker's behavior to evaluate the level of competence shown by their students.

Another of the most educational forms of oral expression is debate. It develops the capacity for analysis and synthesis, forces us to listen very carefully and to respect the criteria of others. It also requires the organization of thought to refute, persuade and convince. Also, panels, interviews, summaries, among others, constitute forms of oral expression that have to be worked on in the Research Methodology classes. The use of them would facilitate students to acquire necessary skills in the use of the oral language.

III. ANALYSIS OF THE RESULTS OF THE SURVEYS APPLIED TO 89 STUDENTS FROM UEES AND ECOTEC UNIVERSITIES WHO CURRENTLY UNDERTAKE THE RESEARCH METHODOLOGY COURSE:
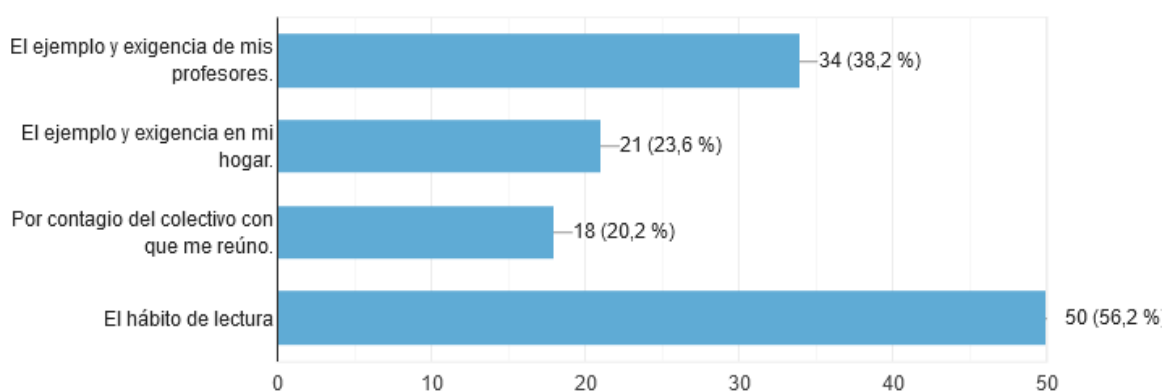
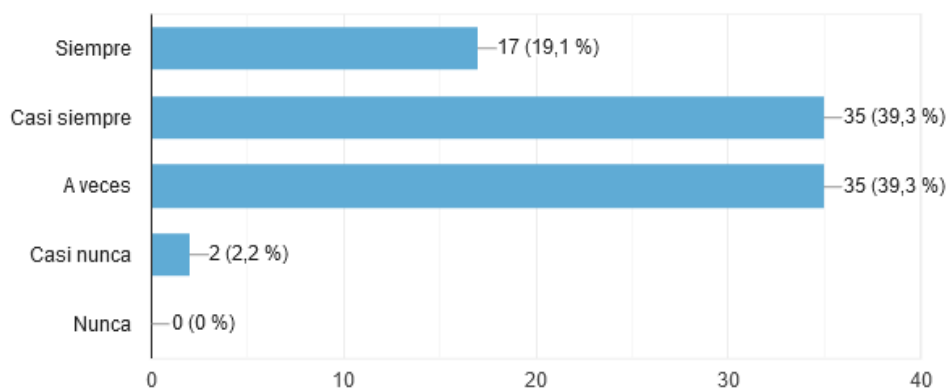### 1- ¿Se siente motivado a la hora de expresarse de forma oral?

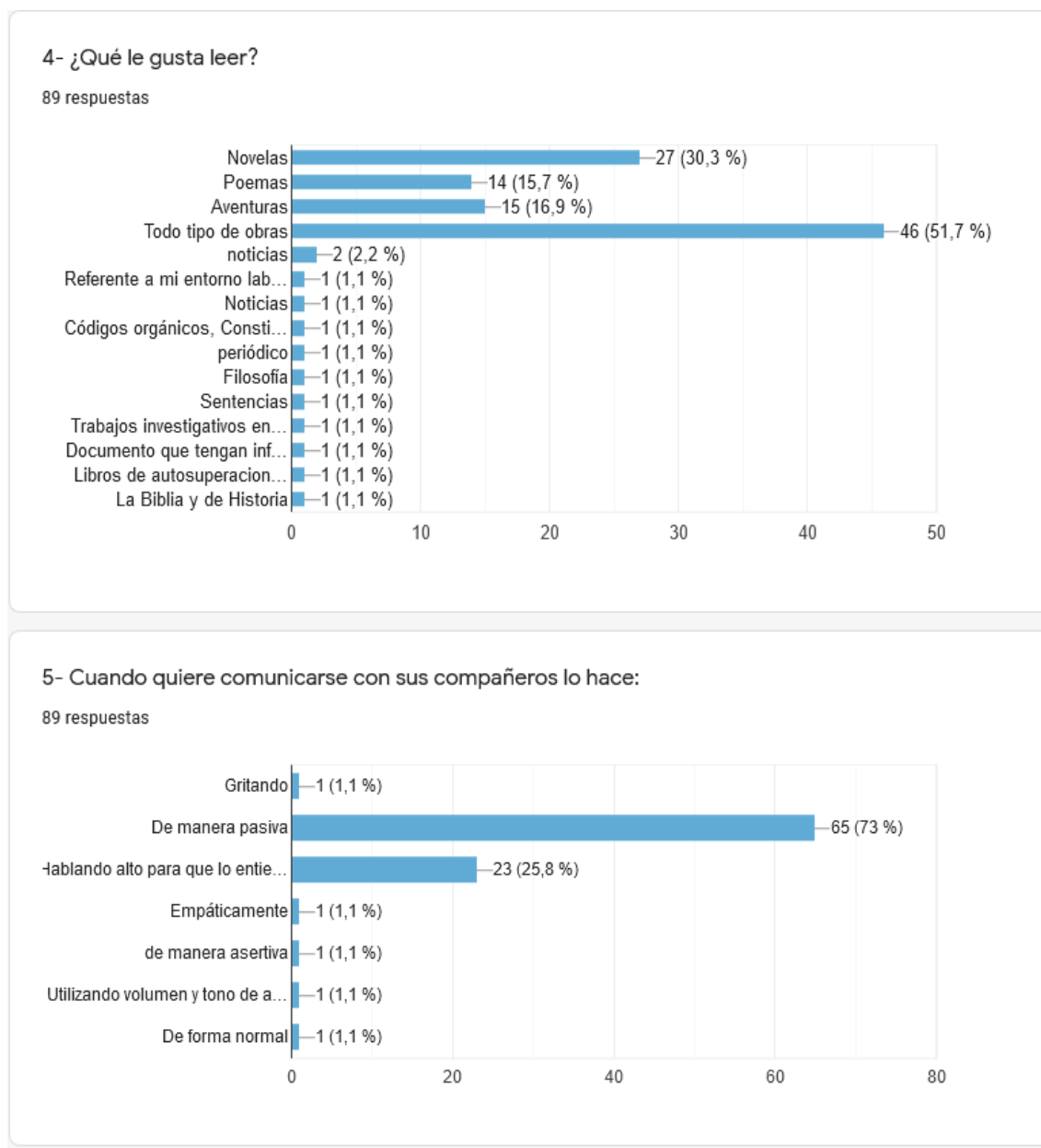89 respuestas
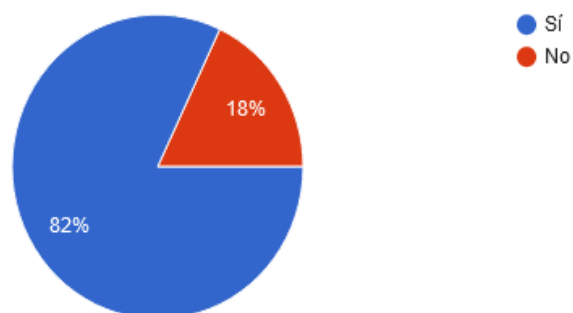
2- ¿Qué vías utiliza para elevar su vocabulario?

89 respuestas

3-¿Con qué frecuencia lee?

89 respuestas

4- ¿Qué le gusta leer?

89 respuestas

Categoría	Valor
Novelas	27 (30,3 %)
Poemas	14 (15,7 %)
Aventuras	15 (16,9 %)
Todo tipo de obras	46 (51,7 %)
noticias	2 (2,2 %)
Referente a mi entorno lab...	1 (1,1 %)
Noticias	1 (1,1 %)
Códigos orgánicos, Consti...	1 (1,1 %)
periódico	1 (1,1 %)
Filosofía	1 (1,1 %)
Sentencias	1 (1,1 %)
Trabajos investigativos en...	1 (1,1 %)
Documento que tengan inf...	1 (1,1 %)
Libros de autosuperacion...	1 (1,1 %)
La Biblia y de Historia	1 (1,1 %)

5- Cuando quiere comunicarse con sus compañeros lo hace:

89 respuestas

Categoría	Valor
Gritando	1 (1,1 %)
De manera pasiva	65 (73 %)
Hablando alto para que lo entie...	23 (25,8 %)
Empáticamente	1 (1,1 %)
de manera asertiva	1 (1,1 %)
Utilizando volumen y tono de a...	1 (1,1 %)
De forma normal	1 (1,1 %)

Prieto & Ayala (2021)

After analyzing the surveys, the researchers can state the following:

1- In the first question about motivation when expressing themselves orally in classes, 82% said they feel stimulated by adequate and correct oral expression, and 18% do not. Considering the results, we conclude that Research Methodology teachers must design various activities, tasks, and presentations that motivate students to participate and use their research and communicative skills.

2- In the second question, students could select several options for improving their vocabulary and oral expression. In addition, 38.2% of respondents expressed motivation from teachers to achieve a higher level of communicative production; 23.6% referred to their relatives; 20.2% to their peers. Finally, 56.2% stated that reading habits are a fundamental and decisive aspect to improve their vocabulary and stimulate oral and written expression as communicative skills.

3- The third question was related to the frequency of reading. The results were as follows: 19.1% expressed that they always read; 39.3% almost always; 39.3% sometimes; 2.2% hardly ever; and 0% never. The results in this question show that we must encourage students to read, especially in the Research Methodology classes.

4- In the fourth question, students could select several options about their reading taste to achieve adequate oral expression skills. They are interested in novels (30.3%), poems (15.7%), adventures (16.9%), randomly selected topics (51.7%). In Research Methodology, readings related to research and scientific works should increase.

5- In question 5, which was about ways to communicate with peers, most stated that they do it passive or indirectly. They prefer to communicate with each other through social networking sites.

Results of the Analysis to the Criteria of Experts

The expert criterion method was applied to corroborate the relevance of the Methodological Strategy for the stimulation of oral expression as a communicative skill aimed at UEES and ECOTEC students studying the subject Research Methodology. Procedures proposed by Prieto (2010) were used through the use of the tables of the Delphosoft program elaborated in Excel. There are two critical moments in applying the method: the selection and consultation of experts. The applied criteria were the following:

- Work experience in communication, research, and literary production and stimulation of oral expression.
- Academic experience and research.
- Scientific publications.

The experts selected showed a broad willingness to collaborate with the investigation.

Master in Education - Wilson Cardoza: more than 30 years of experience teaching high school students scientific methods and academic writing. He is the current Director of the English Department at Torremar High School in Guayaquil – Ecuador.

Ph.D. in Pedagogical Sciences - Francisca Marrero Salazar: more than 30 years of expertise in Higher Education teaching the subjects of Research Methodology and Academic Writing. She has published scientific articles in indexed journals, such as Redalyc, Scopus, Scielo, Latindex, and Dialnet. In addition, she has tutored several graduate theses in education, didactics, and methodology.

Indicators to be evaluated:

1. Didactic strategies to stimulate oral expression in the Research Methodology classes at UEES and ECOTEC Universities.
2. Methodological actions for the stimulation of oral expression skills.

Experts were given the possibility to issue their criteria for the refinement of the proposal. These were as follows:

1. The theoretical-methodological conception constitutes an excellent way to enhance the stimulation of oral expression in university students who study Research Methodology.
2. They evaluate as successful the methodological actions to achieve the stimulation of oral expression in the subject of Research Methodology.
3. The experts' responses showed an increase in the coincidence of the opinions expressed.

TABLE 1
RESULTS OF THE LEVEL OF COMPETENCE OF POTENTIAL EXPERTS
PRIETO & AYALA (2021)

No	Kc	Ka	K=1/2 (Kc+Ka)	LEVEL OF COMPETENCE
1	0,6	0,75	0,675	MIDDLE
2	0,4	0,85	0,625	MIDDLE
3	0,7	0,55	0,625	MIDDLE
4	0,6	0,9	0,75	MIDDLE
5	0,5	1	0,75	MIDDLE
6	0,7	0,85	0,775	MIDDLE
7	0,6	1	0,8	HIGH
8	0,5	0,9	0,7	MIDDLE
9	0,6	0,95	0,775	MIDDLE
10	0,7	1	0,85	HIGH
11	0,6	0,75	0,675	MIDDLE
12	0,5	0,85	0,675	MIDDLE
13	0,5	1	0,75	MIDDLE
14	0,7	0,9	0,8	HIGH
15	0,6	0,95	0,775	MIDDLE
16	0,8	0,85	0,825	HIGH
17	0,5	0,75	0,625	MIDDLE
18	0,7	1	0,85	HIGH
19	0,6	0,95	0,775	MIDDLE
20	0,7	0,9	0,8	HIGH
21	0,8	1	0,9	HIGH
22	0,8	0,75	0,775	MIDDLE
23	0,7	0,85	0,775	MIDDLE
24	0,7	0,95	0,825	HIGH
25	0,8	0,9	0,85	HIGH
26	0,8	0,85	0,825	HIGH
27	0,9	1	0,95	HIGH
28	0,9	0,8	0,85	HIGH
29	0,7	0,95	0,825	HIGH
30	0,6	0,9	0,75	MIDDLE
31	0,8	1	0,9	HIGH
32	0,7	0,75	0,725	MIDDLE
33	0,8	0,8	0,8	HIGH

TABLE 2
TABULATION OF THE PROCESSING OF EXPERT ASSESSMENTS FOR THE STIMULATION OF ORAL EXPRESSION IN UEES AND ECOTEC STUDENTS
FROM THE SUBJECT OF RESEARCH METHODOLOGY.
PRIETO & AYALA (2021)

Primary data					
	C1	C2	C3	S4	S5	TOTAL
Q1	13	11	6	3	0	33
Q2	21	9	3	0	0	33
Q3	24	9	0	0	0	33
Q4	16	9	5	3	0	33
Q5	19	14	0	0	0	33

TABLE 3
CUMULATIVE FREQUENCY
PRIETO & AYALA (2021)

Cumulative frequency table						
	C1	C2	C3	S4	S5	TOTAL
Q1	13	24	30	33	33	33
Q2	11	30	33	33	33	33
Q3	11	33	33	33	33	33
Q4	12	25	30	33	33	33
Q5	10	33	33	33	33	33

	C1	C2	C3	S4	S5
Q1	0,3939	0,7273	0,9091	1,0000	1
Q2	0,3333	0,9091	1,0000	1,0000	1
Q3	0,3333	1,0000	1,0000	1,0000	1
Q4	0,3636	0,7576	0,9091	1,0000	1
Q5	0,3030	1,0000	1,0000	1,0000	1

TABLE 4
RELATIVE CUMULATIVE FREQUENCY IN THE EXPERT OPINION
PRIETO & AYALA (2021)

The relative cumulative frequency table						
	C1	C2	C3	S4	SUM	AVERAGE
Q1	-0,2691	0,6046	1,3352	3,7200	5,3907	1,3477
Q2	-0,4307	1,3352	3,7200	3,7200	8,3445	2,0861
Q3	-0,4307	3,7200	3,7200	3,7200	10,7293	2,6823
Q4	-0,3488	0,6985	1,3352	3,7200	5,4049	1,3512
Q5	-0,5157	3,7200	3,7200	3,7200	10,6443	2,6611
SUM	-1,9950	10,0783	13,8304	18,6000	40,5137	10,1284
AVERAGE	-0,3990	2,0157	2,7661	3,7200	8,1027	2,0257

IV. CONCLUSIONS

It was found that the methods and ways from the educational process for the development of the oral expression of the students in the university context selected are still insufficient.

Communicative competence must follow a sequenced path in which the student in the Research Methodology classes participates in significant communicative activities such as oral presentations and debates. The oral expression must allow students to formulate ideas, solve problems, propose hypotheses, answer academic questions, show agreement or disagreement, and establish contacts with experts and specialists.

This research offers possibilities to develop oral communication by enriching students' vocabulary and increasing their scientific and academic production. Research Methodology classes should be a space for developing oral communication strategies that prepare students to be better interlocutors and make them aware of their possibilities as possible researchers. Teachers must promote the analysis of the factors that affect oral expression and seek activities or tasks to improve it.

REFERENCES

[1] Álvarez, C. (1999). *The School in Life. Didactics*. Editorial Pueblo y Educación. Havana.
[2] Báez, M. (2006). *Towards a more effective communication*, Ed. Pueblo y educación, Havana.
[3] Cassany, D., Luna, M., & Sanz, G. (1994). Oral expression. In *Teaching Language*, Ed. Grao, Barcelona.
[4] Chernousova, L. (2008). *Stimulation of verbal communication of schoolchildren with special educational needs in general language development.* (Doctoral Thesis). University of Pedagogical Sciences "José de la Luz y Caballero". Faculty of Early Childhood Education, Cuba.
[5] Ferrer-Díaz, M. (2003). *Professional skills in the teaching of oral and written communication: a didactic model for the initial training of the pre-university teacher*. Thesis (Master in Pedagogical Sciences), ISP Félix Varela.
[6] González, V. (2001). Psychology for educators. Havana: Editorial Pueblo y Educación.
[7] Garcá-Alzola, E. (1975). "Forms of oral expression" In, *Language and Literature*, Havana: Cuban Book Institute
[8] Hidalgo, P. (2013). *Early stimulation of oral language.* (Diploma Thesis). University of Pedagogical Sciences "José de la Luz y Caballero". Faculty of Early Childhood Education, Cuba.
[9] Núñez, R. (2013). *Teaching literacy in second-graders with mental retardation*. (Diploma Thesis). University of Pedagogical Sciences "José de la Luz y Caballero". Faculty of Early Childhood Education, Cuba.
[10] Ortiz, E. (2020). *Educational Communication*. University of Holguín (Digitized material).
[11] Petrovsky, A. (1985). *Evolutionary and Pedagogical Psychology*. Moscow: Progress.

[12] Prieto, Y. (2010). *The stimulation of educational communication in the formative process of the primary school.* (Doctoral thesis). University of Holguin.

[13] Rodríguez, C. (2006). *"How to improve oral communication in a multicultural context.* University of Cienfuegos. http://www.monografias.com/trabajos21/mejorar-comunicacion/mejorar-comunicacion.shtml [Consulted 12/1/20]

[14] Romú-Escobar, A. (2012). *The cognitive, communicative, and socio-cultural approach in the teaching of language and literature.* Havana: Editorial Pueblo y Educación.

[15] Ruiz-Iglesias, M. (1999). *Didactics of the communicative approach.* National Polytechnic Institute. Mexico

[16] Salazar, M. (2002). *Didactic model for the direction of the process of preparation and acquisition of reading in children from four to seven years old with learning difficulties.* (Doctoral Thesis). Instituto Superior Pedagógico "José de la Luz y Caballero", Facultad de Educación Infantil, Cuba.

[17] Zilberstein, J. (2005). *"Didactic developer from the cultural-historical approach."* Chapter 5. Learning, problems, challenges, and solutions. CEIDE Editions, Mexico.

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Proposed 21st Century Learning Themes in English Classrooms

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Abstract—In many universities in Indonesia, English is still a mandatory subject. The universities provide the courses under the names *Bahasa Inggris* (English), English for Academic purposes, English I to II, English for Proficiency, English for Health Science, etc. Different universities give 2 credits, 3 credits, or more than 4 credits. The teaching materials used are from various sources, such as from the internet, English books published by famous publishers, or modules written by the lecturers. However, the materials provided are often not suitable for the current situation. Therefore, this research was conducted to investigate and seek better alternatives for English learning. What are the students' target needs with respect to English class materials development? What are the students' learning needs with respect to the development of English class material for Social and Political Science's Students? And what suitable materials are available that are in line with 21st-century learning? This study surveyed 437 new students in the first semester from the Social and Political Science Faculty and eight English lecturers National University of Indonesia. Google form questionnaires were used to collect and analyze data. The three main indicators to be analyzed were: students' present situation, students' target situation, and students' learning situation. The results show that 60.9% agree that the topics discussed relate to 21st-century learning, 80.3% of all necessary English skills are learned by the students, and they prefer learning from YouTube/social media and academic journals. Nearly half (46.9 %) were comfortable with learning through blended learning, and 95.6% agreed with the use of Google meet, Google classroom, and Zoom meetings. Furthermore, the materials considered appropriate to 21st-century learning include global awareness, finance, economics, business and entrepreneurial literacy, civic literacy, health literacy, and environmental literacy.

Index Terms—21st Century learning, 21st century interdisciplinary themes, present situation analysis, target situation analysis, learning situation analysis

I. INTRODUCTION

As educators, in the problem of teaching and learning education in the modern era, teachers and lecturers must pay close attention to their students in order to achieve a good teaching and learning process. It means that lecturers or teachers must improve their professionalism to develop student understanding. As a result, student comprehension is being prioritized in order to improve the quality of teaching English as a second language. They hope their students will be satisfied with the subject, English for example. The success of the teaching and learning process relies on the success of both lecturers and students. The learning process is important things to do. However, it must be realized that teaching strategies, teaching materials, and learning methods will determine the outcome.

On the one hand, students go to universities to gain skills and knowledge through their studies while on the other hand the lecturers should facilitate their students to gain appropriate knowledge and skills as well as ethical and social norms and values so that they will be able to compete in the real world after they have completed their studies. That is why education should be oriented towards meaningful learning so that students will be equipped with meaningful knowledge and a variety of life skills to face competition in the 21st century and to face the great challenges of the future. In this context, schools and universities play an important role in molding character through education, as well as transferring and advancing science and technology relevant to people's lives and livelihoods. As technology advances, the universities have to provide a greater opportunity for anyone to access knowledge and skill related information in order to develop literacy, so that the learning process becomes integrative, holistic, and contextual in ways that are compatible with life's demands (Menggo et al., 2019, p. 21).

This study is focused on the situational context of students at the National University of Indonesia (UNAS), specifically Political and Social Science students. In order to graduate, every student must obtain a passing grade in English during several semesters. This poses a challenge for teachers to create syllabi and teaching materials which are in accordance with student needs. At present there is no standard for the textbooks used, the teaching materials utilized, what student projects should be done or what specific skills need to be learned. This situation means that the lecturers must each create their own syllabi and teaching material. In this case, the researchers were interested in designing teaching materials appropriate to a 21st-century learning framework.

According to Trilling and Fadel (2009, p. 18), there is a global discourse about how the world has changed, what this means for education, what everyone needs to learn to be successful, how 21st century learning differs from 20th century learning, and what such learning will or should look like. These questions encouraged the authors to seek answers. In addition, Trilling and Fadel (2009, p. 49), while critical thinking and problem-solving abilities were already required in millennia before, there are now new talents to learn, such as digital media literacy, that were not even envisioned fifty years ago. This reality should be a primary concern for teachers and course creators in order to construct English syllabi and content that are relevant to the current situation and the specific abilities in demand in the 21st-century.

According to Andrade (2016, p. 146), the production of teaching materials in higher education must be matched with the accomplishment of learning outcomes suited for the global world of the 21st-century. Critical thinking, problem solving, written and oral communication, cooperation, information literacy, and other global competences are examples of these (Weda et al., 2021a, p. 3). In a similar vein, Fandiño (2013, p. 202) considers that teachers working in English as a foreign language (EFL) classrooms should provide opportunities for practice and facilitate activity-based learning processes that focus on cross-cutting skills such as creativity, critical thinking, collaboration, media literacy, initiative and self-direction, and social and cross-cultural skills. According to Weda et al. (2021b, p. 729), they stated we cannot imagine our students graduating from their studies without having a worthwhile skill-set; however, According to Trilling and Fadel (2009, p. 7), some students who graduate from high school still lack of certain skills, particularly in oral and written communication, critical thinking and problem solving, professionalism and work ethics, teamwork and collaboration, technology application, leadership, and project management. Moreover, according to Partnership for 21st Century Learning-P21 (2015, p. 9), the very skills that many graduates still lack are among the key 21st-century skills. In addition to specific skills, the themes that should be addressed in learning aligned with 21st-century trends include global awareness, finance and economics, business and entrepreneurial literacy, civic literacy, health literacy, and environmental literacy.

II. RESEARCH OBJECTIVES

The research objectives were designed to analyse and typify the students' target needs and learning needs most relevant to the development of English class materials. These research objectives were formulated based on two research problems, as follows: 1) What are the student target needs with respect to English class material development? and 2) What are the student learning needs with respect to English class material development?

III. REVIEW OF LITERATURE

In recent years, people around the world have been faced with 4.0 industry issues, with the result that companies need to be more selective in recruiting their employees. The people who will have the best chances of being hired will be those who are able to use and have skills in information communication technology (ICT) as well as having 4 C-skills (critical thinking, critical problem solving, communication, and collaboration). Students need to acquire not only strong skills in their core subject areas such as language, arts, mathematics and science, but also cross-cutting competencies like collaboration, creativity and problem-solving, as well as developing character qualities like persistence, curiosity and initiative.

In line with the fourth industrial revolution, which is characterized by global access and disruptive technology, developing means for learners to gain 21st-century skills is critical for enabling graduates to survive and function successfully in this fast growing, global, and complicated environment. The 4C skills are an expression of UNESCO's four learning pillars, which were revealed in learning to know, learning to do, learning to be, and learning to live together. In a nutshell, students are to be prepared to become graduates who are well–applied, well-organized, and well-prepared. As in the real world, the future employer will not necessarily be looking for the person with the highest literacy and numeracy but rather they will be seeking people with creativity, critical thinking, good communication skills, and the ability to collaborate in an adaptive situation. As a result, teachers and practitioners must adapt to this situation by revising and reconsidering their instructional practices. These include, *inter alia*, the development of learning materials suitable for the current situation for use in the classroom.
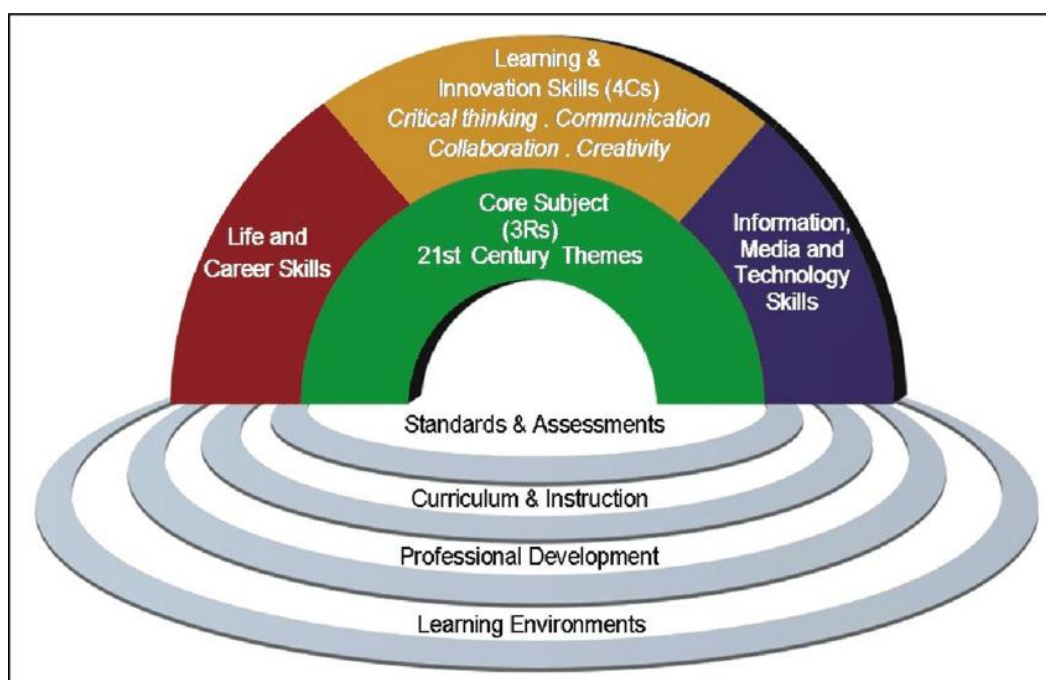
The P21 Partnership for 21st Century Learning was established in 2002 as an outcome of a successful US effort to bring the power of technology to all aspects of teaching and learning. The Framework for 21st Century Learning was created by leaders from industry, education, the community, and government. According to the P21 Partnership for 21st Century learning (2009, p. 4), 21st-century education is a learning process that can produce individuals with knowledge, skills, and abilities in the fields of technology, media, and information, as well as learning and innovation skills and life

and career skills. This framework also explains the skills, information, and expertise that students must acquire in order to be successful in life and at business.

According to the P21 concept, the Indonesian Ministry of Education and Culture interprets the 21st-century learning paradigm as a learning process that emphasizes students' ability to seek and find knowledge and information from various sources, formulate problems, think analytically, and collaborate in problem solving. According to Trilling and Fadel (2009, p. 30), a 21st-century education system combines information with a variety of abilities that can contribute to personal skills, produce civilized citizens, and preserve a high respect for traditional values. P21 has become an increasingly important force in equipping young people to prosper as persons, citizens, and workers.

The following are some of the skills that students must master in 21st-century education, according to the American Association of Colleges for Teacher Education (AACTE) and the Partnership for 21st Century Skills: Creativity and innovation, critical thinking and problem solving, and communication and collaboration are all examples of learning and innovation skills. Information literacy, media literacy, and information/communications/technology literacy are all examples of information, media, and technology skills. Finally, life and career skills include adaptability and flexibility, initiative and self-direction, social and cross-cultural abilities, productivity and accountability, and leadership and responsibility (AACTE, 2010, p. 33).

Furthermore, The American Association of Colleges for Teacher Education (AACTE, 2010, p. 34) also underlines the basic principles for educators in realizing a vision of education that is integrated within the 21st-century knowledge-skills rainbow scheme, which describes the knowledge and skills of the learners. The framework of knowledge skills can be seen in Figure 1.

(Source: P21 Partnership for 21st Century Learning)
Figure 1: The 21st-Century Knowledge-Skills Rainbow (AACTE, 2010)

The College Council for the National Coalition for Core Art Standards (2011, p. 20) was mapped out thirteen standard skills that students must master in 21st century education (21st Century Skills Map) as follows: 'Critical thinking and problem solving, communication, collaboration skills, creativity , innovation, information literacy, media literacy, information communication & technology literacy, flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership skills and responsibilities'. Trilling and Fadel (2009, p. 73) also present three main themes or groups of skills as the basis for 21st century education: (1) career and life skills, (2) digital literacy skills, and (3) learning and innovation skills.

IV. 21ST CENTURY LANGUAGE LEARNING ORIENTATION

As previously mentioned, the 4.0 industrial revolution has had an impact on all aspects of life including education. This era is also called the digitalization era, where there is often no longer a clear dividing line between real and virtual life. This situation forces everyone to follow the stream of change unless they want to be left behind.

The concept of 21st century education highlights how learners can be enabled to incorporate a variety of content including the knowledge, specific skills, expertise, and literacy needed to succeed in work and life (Ledward & Hirata, 2011, p. 13). In addition, the skills acquired must include more than just technological literacy; they need to include skills in critical thinking, problem solving, communication, and teamwork (Rahman & Weda, 2018, p. 166). Creativity,

critical thinking, problem solving, communication, and collaboration are important learning and motivational skills (Joynes et al., 2019, p. 56).

Partnership for 21st Century Learning-P21 (2005, p. 13) research reports and studies cover standards and assessments, curriculum content and instruction, professional development, and learning environments. Another study (Tan et al., 2017, p. 427; Trilling & Fadel, 2009, p. 175) identified eleven skills required for 21st-century success. Communication and collaboration, critical thinking and problem solving, creativity and innovation, information literacy, media literacy, ICT literacy, flexibility and adaptability, initiative and self-direction, social and cross-cultural aspects, productivity and accountability, and leadership and responsibility are some of the skills covered.

Furthermore, the P21 movement has identified key subjects and themes for the 21st-century, such as reading, languages and literature, world languages, arts, mathematics, economics, science, geography, history, government, and citizenship. In addition, P21 schools must adopt special interest themes that can be applied in everyday life, such as Global Awareness, Finance, Economics, Business and Entrepreneurial Literacy, Civic Literacy, Health Literacy, and Environmental Literacy. https://www.battelleforkids.org/networks/p21

V. TARGET NEEDS AND LEARNING NEEDS

Dudley-Evans and St John (1998, pp. 123-124) summarized some basic concepts related to English language education needs. Objective and perceived needs are external factors that do not come from the learners; these needs are influenced by the employers, the teachers, and the alumni. On the other hand, subjective and perceived needs are factors internal to the learners which are related to cognitive and affective aspects; to put it simply, the learners know what they know and what they feel about their own needs.

In developing teaching materials, course developers consider learner needs as a necessary starting point. According to Hutchinson and Waters (1987, p. 54), there is a distinction between target needs (what the learner must do in the target situation) and learning needs (i.e. what students need to do to learn). They go on to say that target needs to include necessities, deficiencies, and desires. Necessities can be interpreted as the learner's desire to function effectively in the target situation. The term "lacks" refers to students' difficulties in dealing with their target situation. Wants are associated with the learners' post-course expectations. Meanwhile, learning requirements include four components: input, procedure, setting, and the learner's role (Nunan, 2005, p. 26). Furthermore, Hutchinson and Waters (1987, p. 54) stated that establishing a course design solely on the target objectives is always insufficient, just as thinking that a journey can be planned solely in terms of the starting point and the destination is insufficient. Learning requirements are also concerned with the path from the starting point (lacks) to the destination (necessities). As a result, learning should be enjoyable, fulfilling, manageable, and generative. Course designers must assess learners' learning needs based on their motivation, the conditions of the learning situation, and their prior knowledge and skills.

The present study was conducted to examine and typify student target needs and learning needs with respect to English class material development, specifically for Political and Social Sciences Students, in order to produce suitable materials in line with 21st-century learning. In this context, the researchers considered that the present situation of learners also needed to be analyzed.

VI. METHODS

In order to seek answers to the research questions, questionnaires were distributed to students taking English classes and to English lecturers. Questionnaire delivery and response via Google forms was adopted due to the limitations imposed by the Covid-19 pandemic regulations in vigor. The questionnaire was sent to the respondents in November 2020. In order to evaluate whether the questionnaire could fulfill the expectations of the researchers, a validation process was carried out before the survey was implemented. During this validation stage, questionnaires were shared with a few students and English lecturers. To provide additional information and input for developing the materials, interviews with English lecturers were also an important and integral part of this study.

A. Population and Sample

The research population was 437 new students in Political and Social Sciences. The students were from several departments: International Relationships, Political Science, Public Administration, Sociological Science, and Communication Science (Table 1).

TABLE 1
RESEARCH POPULATION

No	Department	Number of Students
1	International Relationships	45
2	Political Science	49
3	Public Administration	74
4	Sociological Science	68
5	Communication Science	201
Total		437

This research also involved 13 lecturers who teach English in the Political and Social Sciences Faculty (Table 2). These lecturers participated in a Focus Group Discussion (FGD) to formulate "Learning Themes in the English Classroom to achieve the 21st-Century Knowledge-Skills Rainbow". The department affiliations of the lecturers are shown in Table 2.

TABLE 2
ENGLISH TEACHING STAFF (LECTURERS IN THE FACULTY)

No	Department Base	Number of Teaching Staff
1	International Relationships	2
2	Political Science	2
3	Public Administration	3
4	Sociological Science	2
5	Communication Science	4
	Total	13

The main expertise of the lecturers involved in the FGD included classroom management, syllabus design, teaching material development, and English for specific purposes (Figure 2).
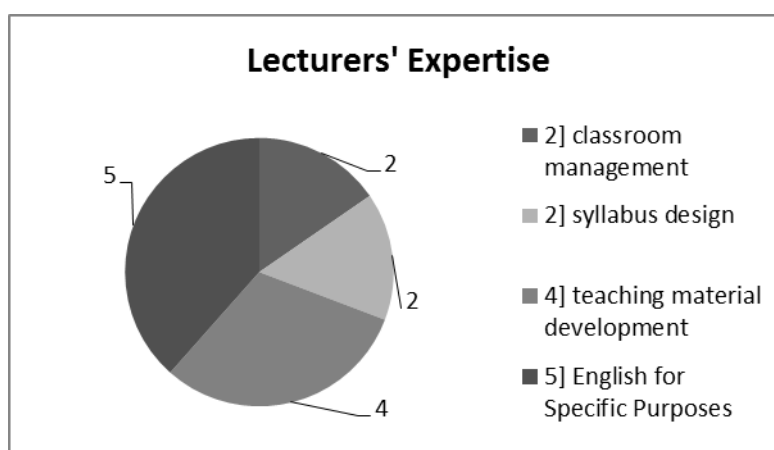
Figure 2: The Main Expertise of English Language Teaching Staff Involved in the FGD

B. Instruments

This research used a questionnaire to collect data. The items were checked by expert judgment to evaluate their relevance or irrelevance with respect to content validity before the questionnaire was distributed. The data were divided into three main question groups: Student's Present situation, Student's Target Situation in Learning English, and Student's Learning Situation. There were twenty-two questions and for each question the students were asked to choose one of the options given. The questions had different numbers of options. Four questions had four options, three questions had five options, two questions had three options, and four questions had two options. Six open-ended questions were also given in order to obtain more in-depth information from the students. The questionnaire was also given to seven lecturers, and two of the lecturers were also interviewed with respect to their knowledge of 21st-century learning.

C. Data Analysis Procedures

Data were collected through two procedures: (1) the questionnaire was distributed to the respondents in stages, due to the procedures used to share the Google form link (URL). The respondents spent around five to seven minutes answering the questions; (2) in-depth interviews were conducted for about thirty minutes. These two procedures took place on different days. In addition, the in-depth interviews were carried out based upon an agreement between the researchers and the English lecturers.

D. Data Analysis

The data obtained during this study were analyzed using Google form analytics with qualitative interpretation. Data from the questionnaire downloaded by the researchers already included basic statistics, in particular the percentages for each response to each of the questions. Data from the in-depth interviews were analyzed qualitatively, as they relied on respondent responses.

VII. FINDINGS AND DISCUSSION

The following discussion includes the results of interviews with a representative sample of two out of the seven English lecturers as well as the results from the questionnaires completed by the new students at the first lecture session

and by the seven English lecturers. The results of the questionnaires answered by Political and Social Sciences Faculty students were the pivot of the analysis on subjective and perceived needs; in other words, student's target needs and students' learning needs. The findings of this study focus on Target Situation, Learning Situation Analysis, and Teaching Context Analysis, as adopted from Philp et al (2010, p. 277). The student questionnaires also covered some points related to Students' Present Situation Analysis.

A. Students' Present Situation Analysis

The present situation analysis discussed the current situation of new students in the Faculty of Political and Social Science at the first meeting of the class. The information covers the students' level in English skills, their ability to understand journals, news on TV, or other social media, and whether they are able to write an English essay or compile a report in English. Based on the results, 65.2 % considered that their current English language skill level was moderate. Furthermore, 71.9 % answered that they were mostly able to understand journals, news on TV, or other social media, albeit not perfectly; and 70.3 % said that they were able to write an essay or simple stories, and compile English reports.

These questions are considered necessary because course developers need to know their students' initial level of language knowledge. According to Dudley-Evans and St. John (1998, p. 125), "analysis of the present situation estimates strengths and weaknesses in language, skills, and learning experiences."

B. Students' Target Situation Analysis

Second Language Acquisition (SLA) concerns learners' situation; this is subjective and relates to how they are feeling their needs and what kind of learning situation they want, based on learner preference with respect to the learning process and their learning styles (Ortega, 2018, p. 72). Furthermore, Hutchinson and Waters (1993, pp. 59-63) also use WH questions (what, when, where, who, whom, which, whose, why and how) while analyzing the target situation and the learning needs. In brief, both analyses of target situation need and analyses of learning needs are vitally important in order to elucidate the reasons of learners and how they learn the language (Rahman et al., 2019, p. 164).

The results of the SLA section show that 73.2% of the students prefer learning through YouTube, Facebook, Instagram, and Twitter as the main media for increasing their English skills. Regarding the tasks, 53.1% consider that both individual and group assignments could be given. As the classes take place virtually, the students are asked to participate in the class using Zoom or Google Meet, and 95.6% of students say they "agree" with this approach.

C. Findings from English Lecturers

In the questionnaire, all respondents (100%) said they "agree" that there is a need for changes in teaching materials based on 21st-century learning approaches. This confirms that there is a real need for teaching materials to be improved. They all also agree the themes for teaching materials should be related to Health literacy, Civic literacy, Environment literacy, Media literacy, Finance and Entrepreneurship literacy. These responses demonstrate that all respondents consider those topics are particularly appropriate for use in teaching the students. Regarding media as a supporting tool in the teaching-learning process, 71.4% highly recommended the inclusion of social media such as videos available on YouTube when designing teaching materials. All but one of the lecturers (85.7%) were willing to take part in designing a module or English book for this class. These responses show that teaching materials adjusted to students' needs and adopting 21st-century learning approach will be more useful and that it should be possible to provide them.

VIII. CONCLUSION AND SUGGESTION

This study examined the results of students' present situation analysis, students' target situation analysis, and learning situation analysis in order to discover what the students actually need to learn in English lessons and what suitable teaching materials are available and could be used. Based on the discussion, the researchers found two important points; firstly, the students' present situation is that their English language knowledge is moderate, and they clearly said that they expect to be able to speak English fluently and correctly. Most of them are able to read English journals and news. In addition, they can write essays, simple stories, and English reports. Secondly, regarding the results of the students' target situation analysis and students' learning analysis, they need to improve all their English language skills and they agree on the topics that should be taught under 21st-century learning approaches. Meanwhile, with respect to learning needs, they like studying by using social media such as YouTube, Facebook, or Instagram to assist them in understanding English. Giving tasks or assignments to the students also needs to be discussed; this is because if there is a pre-discussion between teachers and students, each party will abide by the agreement made. The students agree on both individual and group tasks; in addition, as the AACTE classes are not fully implemented on-site, they willingly accept to study via an online application such as Zoom meeting or Google Meet. Furthermore, the findings reveal that the majority of lecturers are willing to design an English book or module for students at the Faculty of Political and Social Science and to include topics or themes that follow the themes and adopt the approaches of 21st-century learning. The results also show that the teachers are willing to accept the use of social media as a tool in the teaching-learning process. Based on these results, the researcher suggests follow-up steps such as designing a suitable syllabus supported by an English Course Book for students at the Faculty of Political and Social Science at the National University in Jakarta, Indonesia.

REFERENCES

[1] AACTE (American Association of Colleges for Teacher Education). (2010). *21st Century Knowledge and Education*. New York: National Education Association.

[2] Andrade, M. S. (2016). Curricular elements for learner success—21st -century skills. *Journal of Education and Training Studies*, *4*(8), 143–149. https://doi.org/10.11114/jets.v4i8.1743

[3] Dudley-Evans, T. & St John, M. J. (1998). *Developments in English for specific purposes-A multi-disciplinary approach*. Cambridge: Cambridge University Press.

[4] Fandiño, Y. J. (2013). 21st -century skills and the English foreign language classroom: A call for more awareness in Colombia. *Gist Education and Learning Research Journal*, 7(7), 190–208.

[5] Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning-centred approach*. Cambridge: Cambridge University Press.

[6] Joynes, C., Rossignoli, S., & Fenyiwa Amonoo-Kuofi, E. (2019). *21st Century Skills: Evidence of issues in definition, demand and delivery for development contexts (K4D Helpdesk Report)*. Brighton, UK: Institute of Development Studies.

[7] Ledward, B. C., & Hirata, D. (2011). *An overview of 21st century skills*. Summary of 21st Century Skills for Students and Teachers, by Pacific Policy Research Center. Honolulu: Kamehameha Schools–Research & Evaluation, 20.

[8] Menggo, S., Suastra, I. M., Budiarsa, M., & Padmadewi, N. N. (2019). Needs Analysis of Academic-English Speaking Material in Promoting 21st Century Skills. *International Journal of Instruction, 12*(2), 739-754. https://doi.org/10.29333/iji.2019.12247a

[9] Nunan, D. (2005). An Introduction to Task-Based Language Teaching. *The Asian EFL Journal Quarterly June 2005 Volume*, 7, 25-28.

[10] Ortega, L. (2018). Ontologies of language, second language acquisition, and world Englishes. *World Englishes*, *37*, 64–79.

[11] Philp, J., Walter, S., & Basturkmen, H. (2010). Peer interaction in the foreign language classroom: What factors foster a focus on form?. *Language Awareness, 19*(4), 261-279.

[12] Rahman, F., & Weda, S. (2018). Students' perceptions in appreciating English literary works through critical comment: A case study at Hasanuddin University and Universitas Negeri Makassar. *Asian EFL Journal*, *20*(3), 149-172.

[13] Rahman, F., Abbas, A., Hasyim, M. (2019). Facebook Group as Media of Learning Writing in ESP Context: A Case Study at Hasanuddin University. *Asian EFL Journal Research Articles, 26*(6.1), 153-167.

[14] Tan, J., Choo, S., Kang, T., & Liem, G. (2017). Educating for twenty-first-century competencies and future-ready learners: Research perspectives from Singapore. *Asia Pacific Journal of Education, 37*(4), 425–436. https://doi.org/10.1080/02188791.2017.1405475

[15] Trilling, B., & Fadel, C. (2009). *21st -century skills: Learning for life in our times*. San Francisco: Jossey-Bass.

[16] The American Association of Colleges for Teacher Education and the Partnership for 21st Century Skills. (2010). *21st Century Knowledge and Skills in Educator Preparation*. Washington: Pearson.

[17] The College Board for the National Coalition for Core Arts Standards. (2011). *Arts Education Standards and 21st Century Skills: An Analysis of the National Standards for Arts Education (1994) As Compared to the 21st Century Skills Map for the Arts*. New York: The College Board.

[18] Weda, et al. (2021a). Linguistic aspects in intercultural communication (IC) practices at a higher education institution in Indonesia. *European Language Scientific Journal*, *14*, 2-6.

[19] Weda, et al. (2021b). Factors Affecting Students' Willingness to Communicate in EFL Classroom at Higher Institution in Indonesia. *International Journal of Instruction*, *14*(2), 719-734.

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Comparing L2 Incidental Vocabulary Learning Through Viewing, Listening, and Reading

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Abstract—The aim of this study is to determine the most effective mode of input for L2 vocabulary learning by investigating three types of input: audiovisual input, audio input, and written input. Using a pretest-posttest-delayed posttest design, this study recruited 95 university EFL students who were randomly assigned to four groups. The same TV documentary was presented to each group in four different modes: viewing the documentary, listening to the documentary, reading the printed transcript, and a control condition in which no treatment was given. Vocabulary learning, which was operationalized as the receptive knowledge of the form-meaning connection of the target words was measured by checklist and multiple-choice tests. Two variables were considered in the investigation: prior vocabulary knowledge and the word frequency of occurrence. The findings suggest that participants learned vocabulary incidentally through viewing, listening, and reading. They also successfully retained gained vocabulary through the three modes of input. The study found no significant differences in vocabulary gains between viewing and reading on the posttests suggesting that vocabulary gain and retention are similar through these types of input modes. The study found a significant impact of prior vocabulary knowledge and frequency of occurrence on vocabulary learning. As the results suggest that viewing is as effective as reading, this study provides further support for the use of television in L2 learning.

Index Terms—incidental vocabulary learning, L2 viewing, L2 listening, L2 reading

I. INTRODUCTION

Through viewing, listening, and viewing, the different modes of audiovisual, audio, and written L2 input contribute to incidental vocabulary learning. However, some studies found that EFL learners, especially young population prefer audiovisual materials to written materials in learning English outside of the classroom (e.g., Lindgren & Muñoz, 2013; Peters, 2018; Peters et al., 2019). Peters (2018), for example, found that young adult Flemish learners (ages 16 and 19 years) were exposed to large amounts of English language input outside of the classroom including songs, TV programs, movies, and computer games. Interestingly, she found that 40% of the participants watched L2 television and movies several times a week compared to only 1% of them who read L2 books to the same extent. In another survey study, Lindgren and Muñoz (2013) reported that participants spent an amount of time listening to songs and viewing television and movies that was more than three times that of reading. In fact, there is an increasingly supported evidence that L2 viewing of TV yields incidental vocabulary learning and improves vocabulary learning through increasing the amount of meaning-focused spoken input (e.g., Montero Perez et al., 2018; Peters & Webb, 2018; Puimège & Peters, 2019; Webb, 2009).

Vocabulary learning is deemed incidental when learning occurs during reading or listening to a meaningful input without paying attention to vocabulary items. Also, incidental learning has been operationalized in terms of test announcement (Hulstijn, 2003; Peters & Webb, 2018; Rodgers & Webb, 2020) when students are not informed of a vocabulary test. Incidental learning of vocabulary occurs when unknown words are encountered repeatedly in meaning-focused input and refers to learning vocabulary from context when the focus is usually on comprehension not on vocabulary acquisition (Gass, 1999; Hulstijn, 2001; Schmitt, 2010) making it different from the direct intentional learning of vocabulary. Learning vocabulary from context means that learning occurs during activities such as reading or listening to a language input while students' concentration is on the content of the input be it brief or extended (Schmitt, 2010). Thus, learning from context includes learning from various types of language activities including extensive reading, being involved in conversations, listening to stories and the radio, and viewing television. As stated by Nation (2001), most of our first language vocabulary learning occurs through incidental learning during reading and listening times.

Whereas the impact of reading on L2 vocabulary learning has been empirically established (e.g., Pellicer-Sanchez & Schmitt, 2010; Waring & Takaki, 2003), more research efforts are still needed to show the impact of other modes of input on vocabulary acquisition. Two main cognitive theories have been suggested for vocabulary learning through viewing; The Multimedia Learning Theory (Mayer, 2001) and the Dual Coding Theory (Sadoski, 2005; Sadoski & Paivio, 2001). The first theory proposes that processing channels for words in working memory are different from channels responsible for processing pictures. The second theory is based on the idea that there are two coding systems in human cognition, a verbal system that deals with items that are formulated in verbal mode, and an imagery system

that deals with items formulated in nonverbal mode. These two theories assume that better learning occurs when information is presented both in verbal and pictorial forms. Therefore, we suggest that viewing might yield better vocabulary learning than reading and listening. To the best of our knowledge, Feng and Webb (2020) is the only empirical study that compared the three input modes in their most-frequent encountered ways, that is, viewing without captions, listening only, and reading only. The purpose of the current research is to follow up Feng and Webb (2020) study which suggested comparing the three input modes with participants from different backgrounds and different contexts to find out whether their findings can be generalized across different demographic characteristics of L2 learners.

II. LITERATURE REVIEW

A. Incidental Vocabulary Learning through TV Viewing

Recent studies on L2 vocabulary have suggested that viewing TV plays an important role in L2 incidental vocabulary learning (Ahrabi Fakhr et al., 2021; Arndt & Woore, 2018; d'Ydewalle, 2002; Feng & Webb, 2020; Peters et al., 2016; Peters & Webb, 2018). One of the most common and effective types of L2 input is television because of the increased popularity of audiovisual input (TV shows, movies, documentaries, and so on) and the spread of streaming services, smartphones, and computers (Peters, 2019). Peters (2018) found that L2 watching of TV without captions contributed to vocabulary learning in secondary-school and university level learners. L2 watching might have the same potential for L2 vocabulary learning as reading because TV programs are popular among young L2 learners and are easily accessible nowadays. There are several advantages of audiovisual input compared to written and audio inputs: (1) it is motivating, (2) it contains visual support, and (3) it recycles low-frequency words (Peters, 2019). As opposed to written and audio inputs, the key feature of audiovisual input is that aural text and visual images are combined together. In his explanation of the theory of multimedia learning, Mayer (2014) argues that "people learn more deeply from words and pictures than from words alone" (p. 1).

Recent research shows that TV provides multiple exposures to the more-frequent words as well as less-frequent words and that regular viewing of TV would likely contribute to L2 lexical development (Rodgers & Webb, 2017; Webb, 2015; Webb & Rodgers, 2009). There is a support for this claim in studies that investigated incidental vocabulary learning through watching TV programs. For example, Peters and Webb (2018) found that L2 learners were able to recognize almost 14% of the unknown words after watching one full-length television documentary. Similarly, Rodgers and Webb (2020) found that L2 learners could learn 25% percent of the unknown unfamiliar target words after watching 10 episodes of a TV series. In the same vein, Puimege and Peters (2019) reported that TV viewing had an effect on learning unknown lexical items (single words as well as formulaic sequences). All in all, there is growing evidence that L2 vocabulary can be picked up incidentally through TV viewing and that the influence of extensive viewing of L2 television, i.e., viewing a large amount of L2 programs for pleasure could be similar to the influence of extensive reading on vocabulary development (Webb, 2015).

B. Incidental Vocabulary Learning through Listening

A large number of studies have indicated that listening to aural input (e.g., songs, podcasts, academic lectures, and recordings of graded readers) can contribute to L2 incidental vocabulary learning (Arndt & Woore, 2018; Brown et al., 2008; Feng & Webb, 2020; Pavia et al., 2019; van Zeeland & Schmitt, 2013; Vidal, 2003, 2011). Similar to other modes of input, learners need multiple encounters to learn new words through listening. Learners might need different contexts in order to acquire different aspects of vocabulary knowledge including the spoken forms of unknown words, their grammatical functions and collocations, and their meanings (Webb & Nation, 2017). Therefore, the value of listening for learning words is influenced by the amount of spoken input; a larger amount of input likely yields more robust learning of words because words will be met more times (Feng & Webb, 2020). As opposed to reading; however, research showed that L2 incidental vocabulary learning through listening requires a higher number of encounters with unknown words.

Interestingly, the comparison between L2 vocabulary learning gains through reading and listening has revealed that listening can be as effective as reading. For example, Brown et al. (2008) who compared words learned from graded readers through reading only, listening only, and reading-while-listening found that gains from reading were significantly higher than that from listening, yet word retention from listening was better than that from reading. Vidal (2011) also compared incidental vocabulary gains from reading and listening to academic texts. Their results demonstrated that words were incidentally picked up through both input modes, the reading mode resulted in significantly higher scores than the listening mode, and word retention from listening was better than that from reading. Taken together, these studies suggest that listening might be inferior to reading for incidental vocabulary learning. Possible reasons why written input might contribute to larger vocabulary gains than aural input are related to the complexion of spoken versus written language: aural input requires quicker cognitive processes likely making it difficult for listeners to pay enough attention to unfamiliar words because they have less time than readers to focus on individual words (Goh, 2000; Renandya & Farrell, 2011; van Zeeland & Schmitt, 2013). Also, aural input is continuous

and, as opposed to the written, there are no obvious boundaries between words input likely making it more difficult to segment new words encountered (e.g., Goh, 2000).

C. Incidental Vocabulary Learning through Reading

Research has demonstrated the efficacy of reading for incidental learning of L2 vocabulary (e.g., Feng & Webb, 2020; Pellicer-Sanchez & Schmitt, 2010; Pigada & Schmitt, 2006, van Zeeland & Schmitt, 2013; Waring & Takaki, 2003). When unknown words are encountered repeatedly in meaning-focused input, such as reading, incidental learning might occur. Word knowledge achieved by reading includes knowledge of written form, part of speech, and collocation, and the word meaning from the context. As knowledge of encountered words is likely to accumulate when words are met in various contexts, the value for incidental vocabulary learning through reading happens through reading a large amount of written input which can be achieved through extensive reading. Extensive reading refers to an L2 approach in which learners read a large amount of materials for pleasure for an extended period of time. The value of extensive reading for improving L2 vocabulary knowledge has been shown in empirical research (Horst, 2005; Pigada & Schmitt, 2006; Webb & Chang, 2015). The rationale for extensive reading is that it provides multiple encounters of words across texts.

Regarding the role of frequency of occurrence, various thresholds have been suggested for incidental vocabulary learning through reading. For instance, studies such as Waring and Takaki (2003) and Pigada and Schmitt (2006) who used graded readers have suggested that more than 20 encounters with words were needed for vocabulary knowledge to be retained. On the other hand, there are studies that have suggested fewer encounters. For example, the results obtained by Webb (2007) who used sets of short sentences as research materials suggest a minimum of 10 encounters was enough to ensure a relatively large increase in vocabulary knowledge through reading. Also, in a study examining incidental word learning using self-composed short stories as reading materials, Chen and Truscott (2010) found that learning rates for words that have several occurrences in the text were significantly higher than those of the words that had only one occurrence. Overall, it appears that it is difficult to draw a conclusion on the threshold of frequency of word occurrence by which vocabulary learning can be ensured because learning occurred with words that have a few occurrences but it didn't occur with other words with many occurrences.

D. Comparing the Three Modes of Input

There are a great deal of studies that compared written and audio modes of input (e.g., Brown et al., 2008; Vidal, 2011; Webb & Chang, 2015), but Feng and Webb (2020) are the first and remain the only study that included audiovisual input in the investigation along with the other two modes of input. Seventy-six university students learning English in China participated in the study that used a pretest-posttest-delayed posttest design at one-week intervals. The same full-length television documentary was presented to the participants in three different modes: viewing the documentary without captions, listening to the documentary, and reading the printed transcript. Incidental learning of target words was assessed by checklist and multiple-choice tests. The results indicated that L2 incidental vocabulary learning occurred through viewing, listening, and reading and no significant differences were found across the three modes. The researchers suggested that each mode of input should yield similar vocabulary learning gains. The study also found that vocabulary learning was significantly influenced by prior vocabulary knowledge, but not by frequency of occurrence.

However, the finding that listening and reading led to similar amounts of vocabulary gain contrasts previous findings from earlier studies (e.g., Brown et al., 2008; Vidal, 2011). Brown et al. (2008) found that EFL learners incidentally learned more words from graded readers through reading than through listening. In a similar vein, Vidal (2011) used academic reading texts and academic listening lectures in a study with undergraduate students in an ESP course. He found that the Reading participants made greater vocabulary gains than the Listening participants. Due to these differences in findings, Feng and Webb (2020) suggested that more research comparing these two modes of input is needed. Another surprising finding in their study is that viewing did not result in superior vocabulary learning gains to listening and reading given that multimodal input should yield greater vocabulary learning than unimodal input as it is suggested by the Multimedia Learning Theory (Mayer, 2001) and Dual-Coding Theory (Sadoski & Paivio, 2001). One explanation for the contrast, as proposed by the researchers, lies in the speculation that EFL Chinese students' experience in learning through viewing is much more limited that learning through reading and listening largely because L2 television is not a common way for teaching English in China whereas reading and listening are the regular modes used in schools.

E. Prior Vocabulary Knowledge and the Three Modes of Input

Regarding the impact of prior vocabulary knowledge on vocabulary gain through viewing, Rodgers (2013) examined the effects of viewing ten TV episodes on incidental vocabulary learning. Significant correlations were found between prior vocabulary knowledge and vocabulary learning as assessed by two tests measuring knowledge of form-meaning connection at differing sensitivities. Montero Perez et al. (2014) examined the effects of viewing video clips in French by Dutch-speaking learners of French at a Flemish university. They found that the vocabulary size correlated significantly with vocabulary test scores. Peters and Webb (2018) conducted a study with Dutch-speaking EFL learners to explore the influence of viewing a single full-length TV program on incidental acquisition of target vocabulary. They also found that incidental vocabulary learning was affected by prior vocabulary knowledge. More recently, Ahrabi

Fakhr et al. (2021) examined prior vocabulary knowledge and incidental learning of target words through viewing a full-length captioned episode of an English TV program by Iranian EFL students. They found that learning was affected by prior vocabulary knowledge and its effects persisted after 3 months.

The relationship between prior vocabulary knowledge and vocabulary learning through reading was examined in a few studies as well. Webb and Chang (2015) used 20 graded readers with 60 EFL learners over 37 weeks to study how prior word knowledge affected vocabulary learning progress in an extensive reading program. They found a significant relationship between prior vocabulary knowledge and word gains through extensive reading. Feng and Webb (2020) also found a significant positive relationship between prior vocabulary knowledge and vocabulary learning through reading. The explanation suggested by researchers for the impact of greater vocabulary knowledge on learning more vocabulary than limited vocabulary knowledge is that greater vocabulary knowledge should yield better comprehension of the text which makes the context easier for guessing meanings of unfamiliar vocabulary (Liu & Nation, 1985; Schmitt et al., 2011; Webb & Paribakht, 2015).

Listening studies; however, found no relationship between prior vocabulary knowledge and vocabulary learning. Zhang and Graham (2020) investigated the influence of prior vocabulary knowledge and listening proficiency on word gains through listening on EFL Chinese learners. Research materials were three different kinds of spoken vocabulary explanations. The study found that learners' listening proficiency was a more important factor influencing vocabulary learning through listening than their prior vocabulary knowledge. Similarly, Feng and Webb (2020) found no significant positive correlations between prior vocabulary knowledge and vocabulary learning for the Listening group. Two explanations for the lack of a significant correlation between prior vocabulary knowledge and word learning through listening have been presented by Feng and Webb (2020). The first explanation has to do with the inaccuracy of the vocabulary size test that often measured knowledge of written form-meaning connections rather than the spoken form meaning connections of words, the way in which they were tested. The second explanation takes into consideration the impact of other factors such as understanding of the characteristics of L2 spoken input, the ability to process fast speech, and the load of connected speech on vocabulary learning.

III. THE PRESENT STUDY AND RESEARCH QUESTIONS

The differences and contradictions in findings in the abovementioned studies demand more research in this area. The primary aim of this study then is to compare vocabulary learning through viewing, listening, and reading. An English-language TV documentary was used as the research material for three experimental groups: Viewing Group who viewed the documentary, Listening Group who listened to the audio of the documentary, and Reading Group who read the transcript of the documentary. This research design ensured a direct comparison of vocabulary learning in different modes of input by controlling the input, i.e., the same input was presented to participants across the three groups. This study is necessary because if TV viewing should be used in L2 classes as promoted by some researchers (e.g., Peters & Webb, 2018; Rodgers & Webb, 2020; Webb, 2015; Webb & Nation, 2017), understanding its effectiveness in relation to the other modes of input is necessary. To that end, the present study attempts to answer the following research questions:

1. To what extent is vocabulary knowledge learned and retained through viewing audiovisual input, listening to aural input, and reading input written?
2. How do vocabulary acquisition and retention compare across audiovisual, aural, and written input?
3. In each input mode, is there any relationship between vocabulary learning and prior vocabulary knowledge and frequency of word occurrence?

IV. METHODOLOGY

A. Participants

This quasi-experimental study was conducted in an EFL context with 95 male Arabic-speaking students (M_{age}= 19.33 years, SD = .41). The participants were students in an English program in a Saudi public university. Participants had been studying EFL for a minimum of seven years in public schools. Their English proficiency levels were considered to be pre-intermediate to intermediate according to an in-house English proficiency exam. They were in four similar-size classes that were randomly assigned by the program. The Viewing Group had twenty-six participants; the Listening Group had twenty-three participants; the Reading Group had twenty-five participants; and the Control Group had twenty-one students. Data collection took place during their class time and their preassigned classes were used as the experimental groups.

The participants were administered the updated Vocabulary Levels Test (VLT; Webb et al., 2017) at the 1,000-, 2000-, 3000-, 4,000-, and 5,000-word levels to assess their prior vocabulary knowledge. The total possible score for all five sections of the test is 150 marks (30 marks for each section). According to Webb et al.'s (2017) suggestion, the results obtained from the test indicated that all participants knew the most frequent 1,000 words, 82 (86.31%) of them knew the most frequent 2,000 words, and 57 (60%) of them knew the most frequent 3,000 words. Participants' scores on the VLT were used as an indicator of their vocabulary knowledge. ANOVA ($F(2, 92) = .726, p = 2.40$) indicated no

significant difference between the groups on the VLT scores. This result indicated that participants' vocabulary levels were equivalent among the four groups. The VLT results are shown in Table 1.

TABLE 1
PARTICIPANTS' AVERAGE SCORES ON THE VLT

	Viewing Group	Listening Group	Reading Group	Control Group	All Groups
N	26	23	25	21	95
M	122.12	118.40	120.91	122.03	120.86
SD	10.02	14.33	12.28	13.93	12.64

B. Source of Input

One full-length, 51-min documentary episode titled "Building Sea City" uploaded on YouTube by Spark was used as the research materials. The documentary follows a team of engineers on the ground in Kuwait where they have to build a futuristic sea city. The transcript contained 7,088 running words and was examined to ensure that it was not different from the vocabulary in the video. The transcript was analyzed through Cobb's Lextutor's VocabProfile using the BNC/COCA word lists to statistically ascertain its vocabulary load, i.e., the percentage of words found across different frequency vocabulary lists. The analysis showed the most frequent 3,000-word families provided 95.1% coverage of the words found in the documentary. The vocabulary load of the transcript was believed to be at an appropriate level for all participants.

C. Target Words

The target words were chosen based on their frequency levels in the BNC/COCA word lists and their frequency within the documentary. Words that were from the most frequent 1,000, and 2,000-word families were not selected because there was a reasonable chance that the participants had a sufficient knowledge of most of these word levels. The frequency of the vocabulary was determined by running the transcript in Cobb's Lextutor's VocabProfile. Lextutor also sorted the vocabulary in the documentary in relation to their inclusion in the BNC/COCA twenty-four 1000-word frequency lists. Word types that most commonly occurred from the word families in the documentary were used as the vocabulary test items. Thirty-eight vocabulary items were selected from the documentary as target words. The range of frequency of the target words was from 1 to 23 occurrences. Table 2 provides the target words, their word-family levels, and their number of occurrences in the documentary.

TABLE 2
TARGET WORDS AND THEIR OCCURRENCE FREQUENCY IN "BUILDING SEA CITY"

Target word (Word family)	Word list (1,000)	Frequency of occurrences	Target word (Word family)	Word list (1,000)	Frequency of occurrences
1. assess	3	3	20. peg	6	3
2. circulate	3	5	21. groin	7	2
3. impact	3	6	22. gush	7	1
4. vast	3	5	23. hydraulic	7	3
5. unique	3	5	24. ingenious	7	1
6. marine	3	17	25. lagoon	7	23
7. monitor	3	3	26. throttle	7	1
8. align	4	2	27. silt	8	8
9. ambition	4	3	28. stagnant	8	4
10. compact	4	9	29. stagnate	8	2
11. flush	4	17	30. stockpile	8	2
12. habitat	4	4	31. dyke	10	1
13. excavate	4	6	32. bulkhead	10	1
14. grid	4	2	33. legume	11	1
15. creek	5	3	34. mangrove	11	5
16. override	5	2	35. impound	12	3
17. quarry	5	3	36. vestry	12	1
18. reef	5	1	37. dewater	17	2
19. patronage	6	1	38. revetment	19	8

V. DATA COLLECTION

A. Checklist Test

Feng and Webb's (2020) study was followed in the design of the checklist test. The paper-and-pencil test required participants to write *yes* or *no* next to each target word to assess their knowledge. Following Meara's (1992) *yes/no* EFL vocabulary test, 50 word items were included in the test: the 38 target words, 7 easy words that are believed to be familiar to all participants, and 5 fake words. The 12 easy and fake words were excluded from the analysis. The inclusion of 7 familiar words was hoped to encourage the participants to complete the test. The five nonwords were selected from the ARC Nonword Database developed by Rastle et al. (2002). The rationale for using nonwords was to reduce the limitation of overestimation of participants' vocabulary knowledge produced by the VLT or caused by not

taking the test seriously. When "yes" is given to a nonword, the response receives a "false alarm" but when "yes" is given to a real word, the response receives a "hit." The percentage of known words is estimated by the following formula proposed by Anderson and Freebody (1983) and Shu et al. (1995): the proportion of hits on real words minus the proportion of false alarms on nonwords, divided by one minus the proportion of false alarms on nonwords. Each word was read twice and there was a five-second pause between the items.

B. Multiple-choice Test

The multiple-choice test measured the receptive knowledge of the form-meaning connection of the target words. The test included the same 50 items from the checklist test and consisted of a key word and three distractors in the participants' L1 (Arabic) and in English. Distractors shared aspects of form or meaning with the correct answer to raise its difficulty. To reduce the effect of guessing, an '*I don't know this word.*' option was included as a fifth option. The same 12 easy and nonwords from the checklist test were also included in the multiple-choice test for the same purposes, but were excluded from the analysis. Table 3 shows how items appeared on the test by taking Item #28 as an example.

TABLE 3
EXAMPLE OF THE MULTIPLE-CHOICE TEST; ITEM #28

Target word	Stagnant				
Options	**A.** مائل	**B.** ثائر	**C.** راكد	**D.** نقي	**E.** لا أعرف هذه الكلمة
English translation	**A.** Diagonal	**B.** Eruptive	**C.** Still	**D.** Pure	**E.** I don't know this word

VI. RESULTS

A. Preliminary Analyses: Descriptive and Inferential Statistics

Descriptive statistics were first calculated for the checklist test and multiple-choice test at the three test times (see Table 4 and Table 5). The common measure of reliability, i.e. Cronbach's alpha, which is based on a correlation matrix, was calculated to assess reliability between the tests. The Cronbach's alpha coefficient was considered acceptable, α = .79. From the pretest to the immediate posttest, all groups (including the Control Group) showed higher mean scores both on the checklist test and on the multiple-choice test. On the delayed checklist and multiple-choice posttests, experimental participants' average scores had increased, while the Control Group failed to increase their scores on both tests. From immediate posttest to delayed posttest, the Viewing, Reading, and Control groups showed relatively little lower mean scores on both tests, while the Listening Group had increased their average scores only on the multiple-choice test. Inferential analyses (Repeated Measures ANOVA, one-way ANCOVA, and Pearson's *r* correlation) were then performed to examine the statistical significance of the observed differences.

TABLE 4
MEANS (*M*) AND STANDARD DEVIATIONS (*SD*) OF THE SCORES ON THE CHECKLIST TEST

		Pretest		Posttest		Delayed posttest	
Group	*N*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Viewing	26	0.518	0.346	0.677	0.125	0.659	0.978
Listening	23	0.497	0.834	0.576	0.903	0.519	0.265
Reading	25	0.481	0.118	0.648	0.482	0.635	0.537
Control	21	0.503	0.226	0.514	0.740	0.499	0.091

Note: 1 is the maximum possible score (100%).

TABLE 5
MEANS (*M*) AND STANDARD DEVIATIONS (*SD*) OF THE SCORES ON THE MULTIPLE-CHOICE TEST

		Pretest		Posttest		Delayed posttest	
Group	*N*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Viewing	26	15.72	7.12	20.05	5.03	19.45	4.86
Listening	23	17.86	8.23	19.74	7.49	20.16	5.38
Reading	25	16.93	6.87	20.91	5.57	20.10	4.77
Control	21	15.90	3.81	16.01	2.59	15.13	2.72

Note: Maximum score is 38.

B. Research Question 1: To What Extent Is Vocabulary Knowledge Learned And Retained Through Viewing Audiovisual Input, Listening To Aural Input, And Reading Input Written?

Repeated Measures ANOVA was carried out to provide an answer to the first study question. Results of ANOVA indicate that the interaction of Time and Treatment had a significant effect on the scores both of the checklist test, ($F(3.49, 153.61) = 43.17$, $p < .001$, $R^2 = .72$, $eta^2 = .72$) and of the multiple-choice test ($F(3.82, 151.92) = 46.83$, $p < .001$, $R^2 = .68$, $eta^2 = .68$). The results of the Wilcoxon tests corrected with Bonferroni showed where the divergences between Time across the experimental groups.

For the checklist test, the results showed that the experimental groups had significantly higher scores on the immediate and delayed posttests ($p < .001$ for the Viewing and Reading Group; $p < .05$ for the Listening Group), but no significant differences were detected for the Control Group ($p > .05$). The experimental groups' scores on the delayed posttest were not significantly different from their scores on the immediate posttest scores ($p > .05$). Regarding multiple-choice test data, the same results were obtained. Scores on the immediate posttest and delayed posttest were significantly higher than the pretest scores for all the experimental groups ($p < .001$ for the Viewing and Reading Group; $p < .05$ for the Listening Group) but no significant differences were detected for the Control Group ($p > .05$). The scores on the delayed posttest were not significantly different from scores on the immediate posttest scores for all the experimental groups ($p > .05$).

C. Research Question 2: How Do Vocabulary Acquisition and Retention Compare Across Audiovisual, Aural, and Written Input?

To provide an answer to the second question, ANCOVA was used to assess which mode of input yielded significantly better vocabulary acquisition and retention after controlling for the pretest scores. Results obtained from ANCOVA revealed that the scores on the posttest were significantly different between groups after the pretest scores were controlled both for the checklist test ($F(3, 90) = 22.66$, $p < .001$, $R^2 = .43$, $eta^2 = .43$) and for the multiple-choice test ($F(3, 90) = 28.14$, $p < .001$, $R^2 = .36$, $eta^2 = .65$). Scores of the delayed checklist and multiple-choice posttests were not significantly different from those of the immediate posttests across the groups ($p > .05$). A Bonferroni post-hoc test of the immediate posttest revealed that the experimental groups had significantly higher scores both on the checklist posttest and on the multiple-choice test than the Control Group ($p < .001$ for the Viewing and Reading Group; $p < .05$ for the Listening Group). Also, the post-hoc test revealed that the Viewing Group and the Reading Group both had significantly higher vocabulary gains ($p < .05$) than the Listening Group both on the checklist and on the multiple-choice posttest after controlling for the pretest scores.

D. Research Question 3: In Each Input Mode, Is There Any Relationship between Vocabulary Learning and Prior Vocabulary Knowledge and Frequency of Word Occurrence?

To investigate if there was a statistically significant association between prior vocabulary knowledge (the VLT scores) in the three experimental groups and their posttest scores, Pearson Correlation (r) correlation was computed. The direction of the correlation was significantly positive only for the Viewing and Reading Group, which means that students' VLT scores were correlated with the immediate posttest and delayed posttest scores both on the checklist and on the multiple-choice tests. The significance levels (p) were $< .001$ for the Viewing and Reading Group and $>.05$ for the Listening Group. This suggests that the more vocabulary the students knew when viewing or reading a text, the greater their vocabulary learning gains.

To answer the second part of the question and to explore the effect of frequency of occurrence on incidental vocabulary learning, learning rates (number of students who learned each word) were calculated to assess vocabulary learning (Feng & Webb, 2020). Word occurrences had an average frequency of 4.45 ($SD = 4.87$). Pearson Correlation (r) correlation was computed and was used to investigate the relationship between frequency of occurrence and the learning rate of each word. The direction of the correlation was significantly positive, which means that frequency of occurrence was significantly related to incidental vocabulary learning in all the three modes. The significance levels (p) were $< .001$ for the Viewing and Reading Group and $< .05$ for the Listening Group. This means that the more a word occurs in a text, the greater vocabulary learning chance.

VII. DISCUSSION

A. Incidental Vocabulary Learning Through Different Modes of Input

The study found that significant vocabulary learning occurred through the different modes of input. This finding is consistent with previous studies where vocabulary knowledge was achieved incidentally through viewing audiovisual input (e.g., Ahrabi Fakhr et al., 2021; Feng & Webb, 2020; Montero Perez et al., 2014; Peters & Webb, 2018), listening to audio input (e.g., van Zeeland & Schmitt, 2013; Vidal, 2003), and reading written input (e.g., Waring & Takaki, 2003). With regards to retention, students successfully retained all gained words after one week of the treatment in all three modes of input. These findings are also consistent with earlier studies where gained words were retained one week after viewing audiovisual input (e.g., Ahrabi Fakhr et al., 2021; Feng & Webb, 2020), listening to audio input, and reading written input (e.g., Brown et al., 2008; Feng & Webb, 2020). More importantly, these findings provide an informed support of learning L2 vocabulary through viewing L2 television which is a common mode of L2 input by many EFL learners (Gieve & Clark, 2005; Peters & Webb, 2018; Rodgers, 2013). This is particularly important because previous research has been focused on incidental vocabulary through viewing short segments of videos (e.g., Montero Perez et al., 2014; Sydorenko, 2010) or specialized materials such as academic speeches (e.g., Vidal, 2003, 2011) which might be less favorable forms of viewing in many L2 contexts.

B. The Comparison of Vocabulary Learning across the Three Modes of Input

Our results showed that viewing and reading led to more vocabulary learning gains than listening. This suggests that the three modes of input are not equally effective for incidental vocabulary learning. This finding contrasts Feng and Webb's (2020) findings showing that viewing, listening, and reading led to similar vocabulary learning gains. Our findings are consistent with Brown et al.'s (2008) findings indicating that reading graded readers led to more incidentally word gains by EFL learners than listening to graded readers and with Vidal's (2011) findings showing that ESP students gained more vocabulary through reading academic texts than listening to academic lectures. These findings are consistent with Multimedia Learning Theory (Mayer, 2001) and Dual-Coding Theory (Sadoski & Paivio, 2001) that suggest that presenting information in verbal and pictorial forms together can improve learning. Therefore, as explained by previous studies (e.g., Peters et al., 2016; Peters, 2019; Peters & Webb, 2018; Rodgers & Webb, 2020) the combination of aural text and visual images could have influenced vocabulary learning through viewing. Listening was inferior to reading for incidental vocabulary learning in this study because spoken input requires faster processing and provides less time than reading to focus on individual words (Goh, 2000; Renandya & Farrell, 2011; van Zeeland & Schmitt, 2013). Also, there are no obvious boundaries between words in spoken input, making lexical segmentation more difficult (e.g., Goh, 2000).

C. The Relationship between Vocabulary Learning and Prior Vocabulary Knowledge

The results indicated that the relationship between prior vocabulary knowledge and incidental vocabulary learning was significant for the Viewing and Reading Group, but not for the Listening Group. This is consistent with earlier findings indicating positive correlations between prior vocabulary knowledge and vocabulary gain through viewing (Ahrabi Fakhr et al., 2021; Feng & Webb, 2020; Montero Perez et al., 2014; Peters & Webb, 2018; Rodgers, 2013) and through reading (Feng & Webb, 2020; Webb & Chang, 2015). There might be various reasons for the lack of a significant correlation between prior vocabulary knowledge and word learning through listening. The first explanation has to do with the fact that "the VLT measures knowledge of the written form of the word, whereas listening involves ability to recognize the spoken form of the word" (Stæhr, 2008, p. 148). The second reason takes into consideration the impact of other factors such as familiarity with L2 spoken input, tone of voice, speech rate, contextual information from gestures, and the amount of connected speech on vocabulary learning through listening.

D. The Relationship between Vocabulary Learning and Frequency of Occurrence

The findings showed that there was a significant relationship between frequency of occurrence and incidental vocabulary learning in all the three modes of input. This is supported by earlier findings indicating that the chance for incidental learning of a word increases when the number of encounters increases in viewing (Ahrabi Fakhr et al., 2021; Peters & Webb, 2018), in listening (Brown et al., 2008; Vidal, 2011), and in reading (Brown et al., 2008; Waring & Takaki, 2003). The correlation results showed that the effect of frequency of occurrence in listening was smaller than viewing and reading. This is also in line with previous findings. For example, Brown et al. (2008) found that listening yielded a 3% learning chance for words that had 15 to 20 occurrences, while reading yielded a 20% learning chance for words that had 10 to 13 occurrences. Again, the reason why there is a smaller effect of frequency of occurrence in listening for incidental vocabulary learning is that listening does not provide enough support to listeners who have to process words fast in real time.

VIII. CONCLUSION AND PEDAGOGICAL IMPLICATIONS

Regardless of the limitations, this study provides several implications for teaching. First, it is useful to learn new vocabulary in any of the three of the input modes. Teachers in classrooms are encouraged to train and support their students learning L2 vocabulary with a range of modes of input. When learners view, listen, or read large amounts of input outside of the classroom, meaning-focused input should enhance their L2 lexical development (Webb & Nation, 2017). Additionally, the fact that extensive reading has been promoted and introduced as the sole important resource for lexical growth, this study found that lexical development is also possible with extensive viewing and extensive listening. This study suggests that extensive viewing and extensive listening can be used together with extensive reading (Rodgers & Webb, 2017; Webb, 2015). In conclusion, the study found that L2 incidental vocabulary learning occurred through viewing, listening, and reading and that vocabulary gain was retained one week after encountering the input. However, these modes of input were not equally effective for incidental vocabulary learning. Vocabulary gains in viewing and reading modes were greater than the listening mode. A significant relationship between prior vocabulary knowledge and vocabulary learning gains and retention was found for the viewing and reading modes and between frequency of occurrence and vocabulary learning for the three modes. Finally, because extensive reading has long been supported and promoted by research for L2 learning, there should be programs developed based on extensive listening and extensive viewing.

REFERENCES

[1]   Ahrabi Fakhr, M., Borzabadi Farahani, D., & Khomeijani Farahani, A. A. (2021). Incidental vocabulary learning and retention from audiovisual input and factors affecting them. *English Teaching & Learning*, *45*(2), 167–188. https://doi.org/10.1007/s42321-020-00066-y

[2]   Anderson, R. C. & Freebody, P. (1983). Reading comprehension and the assessment and acquisition of word knowledge. In B. Hutson (Ed.), *Advances in reading language research* (pp. 231–256). JAI Press.

[3]   Arndt, H. L., & Woore, R. (2018). Vocabulary learning from watching YouTube videos and reading blog posts. *Language Learning & Technology*, 22(3), 124–142. https://doi.org/10125/44660

[4]   Brown, R., Waring, R., & Donkaewbua, S. (2008). Incidental vocabulary acquisition from reading, reading while-listening, and listening to stories. *Reading in a Foreign Language*, 20, 136–163.

[5]   Chen, C., & Truscott, J. (2010). The effects of repetition and L1 lexicalization on incidental vocabulary acquisition. *Applied Linguistics*, 31, 693–713. http://doi.org/10.1093/applin/amq031

[6]   d'Ydewalle, G. (2002). Foreign-language acquisition by watching subtitled television programs. *Journal of Foreign Language Education and Research*, 4, 59–77.

[7]   Feng, Y., & Webb, S. (2020). Learning vocabulary through reading, listening, and viewing: Which mode of input is most effective?. *Studies in Second Language Acquisition*, 42(3), 499–523. doi:10.1017/S0272263119000494

[8]   Gass, S. M. (1999). Discussion: Incidental vocabulary learning. *Studies in Second Language Acquisition*, 21, 319–333.

[9]   Gieve, S., & Clark, R. (2005). "The Chinese approach to learning": Cultural trait or situated response? The case of a self-directed learning programme. *System*, 33, 261–276. http://doi.org/10.1016/j.system.2004.09.015

[10]   Goh, C. C. M. (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28, 55–75. https://doi.org/10.1016/S0346-251X(99)00060-3

[11]   Horst, M. (2005). Learning l2 vocabulary through extensive reading: A measurement study. *The Canadian Modern Language Review*, 61, 355–382.

[12]   Hulstijn, J. H. (2001). Intentional and incidental second-language vocabulary learning: A reappraisal of elaboration, rehearsal and automaticity. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 258–286). Cambridge University Press.

[13]   Hulstijn, J. H. (2003). Incidental and intentional learning. In C. Doughty, & M. H. Long (Eds.), *Handbook of second language acquisition* (pp. 349–381). Blackwell.

[14]   Lindgren, E., & Muñoz, C. (2013). The influence of exposure, parents, and linguistic distance on young European learners' foreign language comprehension. *International Journal of Multilingualism*, 10(1), 105–129. https://doi.org/10.1080/14790718.2012.679275

[15]   Liu, N., & Nation, I. S. P. (1985). Factors affecting guessing vocabulary in context. *RELC Journal*, 16, 33–42. https://doi.org/10.1177%2F003368828501600103

[16]   Mayer, R. (2001). Multimedia learning. Cambridge University Press.

[17]   Mayer, R. (2014). Introduction to multimedia learning. In R. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (pp. 1–24). Cambridge University Press.

[18]   Montero Perez, M., Peters, E., Clarebout, G., & Desmet, P. (2014). Effects of captioning on video comprehension and incidental vocabulary learning. *Language Learning & Technology*, 18(1), 118–141.

[19]   Montero Perez, M., Peters, E., & Desmet, P. (2018). Vocabulary learning through viewing video: the effect of two enhancement techniques. *Computer Assisted Language Learning*, 31(1–2), 1–26. https://doi.org/10.1080/09588221.2017.1375960

[20]   Nation, I. S. (2001). *Learning vocabulary in another language*. Cambridge University Press.

[21]   Pavia, N., Webb, S., & Faez, F. (2019). Incidental vocabulary learning through listening to songs. *Studies in Second Language Acquisition*, 41, 745–768. https://doi.org/10.1017/S0272263119000020

[22]   Pellicer-Sanchez, A., & Schmitt, N. (2010). Incidental vocabulary acquisition from an authentic novel: Do things fall apart? *Reading in a Foreign Language*, 22(1), 31–55.

[23]   Peters, E. (2018). The effect of out-of-class exposure to English language media on learners' vocabulary knowledge. *ITL-International Journal of Applied Linguistics*, 169(1), 142–168. https://doi.org/10.1075/itl.00010.pet

[24]   Peters, E. (2019). The effect of imagery and on-screen text on foreign language vocabulary learning from audiovisual input. *TESOL Quarterly*, 53(4), 1008–1032.

[25]   Peters, E., Heynen, E., & Puimège, E. (2016). Learning vocabulary through audiovisual input: the differential effect of L1 subtitles and captions. *System*, 63, 134–148. https://doi.org/10.1016/j.system. 2016.10.002

[26]   Peters, E., Noreillie, A. S., Heylen, K., Bulté, B., & Desmet, P. (2019). The impact of instruction and out of-school exposure to foreign language input on learners' vocabulary knowledge in two languages. *Language Learning*, 69(3), 747–782. https://doi.org/10.1111/lang.12351

[27]   Peters, E., & Webb, S. (2018). Incidental vocabulary acquisition through viewing L2 television and factors that affect learning. *Studies in Second Language Acquisition*, 40, 551–577. https://doi.org/10. 1017/S0272263117000407

[28]   Pigada, M., & Schmitt, N. (2006). Vocabulary acquisition from extensive reading: A case study. *Reading in a Foreign Language*, 18(1), 1–28.

[29]   Puimège, E., & Peters, E. (2019). Learning L2 vocabulary from audiovisual input: an exploratory study into incidental learning of single words and formulaic sequences. *The Language Learning Journal*, 47, 424–438. https://doi.org/10.1080/09571736.2019.1638630

[30]   Rastle, K., Harrington, J., & Coltheart, M. (2002). 358,534 nonwords: The ARC Nonword Database. *The Quarterly Journal of Experimental Psychology*, 55A, 1339–1362. http://doi.org/10.1080/ 02724980244000099

[31]   Renandya, W. A., & Farrell, T. S. C. (2011). "Teacher, the tape is too fast!" Extensive listening in ELT. *ELT Journal*, 65, 52–59. http://doi.org/10.1093/elt/ccq015

[32]   Rodgers, M. P. (2013). *English language learning through viewing television: An investigation of comprehension, incidental vocabulary acquisition, lexical coverage, attitudes, and captions* [Unpublished doctoral dissertation, Victoria University of Wellington]. Retrieved January 15, 2022, from http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/2870/thesis.pdf?sequence52

[33]   Rodgers, M. P., & Webb, S. (2017). The effects of captions on EFL learners' comprehension of English-language television programs. *CALICO Journal*, 34(1), 20–38. https://doi.org/10.1558/cj.29522

[34] Rodgers, M. P., & Webb, S. (2020). Incidental vocabulary learning through viewing television. *ITL-International Journal of Applied Linguistics*, *171*(2), 191–220. https://doi.org/10.1075/itl.18034.rod

[35] Sadoski, M. (2005). A dual coding view of vocabulary learning. *Reading and Writing Quarterly*, *21*, 221–238. http://doi.org/10.1080/10573560590949359

[36] Sadoski, M., & Paivio, A. (2001). *Imagery and text: A dual coding theory of reading and writing*. Lawrence Erlbaum Associates.

[37] Schmitt, N. (2010). *Researching vocabulary: A vocabulary research manual*. Springer.

[38] Schmitt, N., Jiang, X., & Grabe, W. (2011). The percentage of words known in a text and reading comprehension. *The Modern Language Journal*, *95*, 26–43. http://doi.org/10.1111/j.1540-4781.2011.01146.x

[39] Shu, H., Anderson, R. C., & Zhang, H. (1995). Incidental learning of word meanings while reading: A Chinese and American cross-cultural study. *Reading Research Quarterly*, *30*, 76–95. https://doi.org/10.2307/747745

[40] Stæhr, L. S. (2008). Vocabulary size and the skills of listening, reading and writing. *Language Learning Journal*, *36*, 139–152. http://doi.org/10.1080/09571730802389975

[41] Sydorenko, T. (2010). Modality of input and vocabulary acquisition. *Language Learning & Technology*, *14*(2), 50–73. http://dx.doi.org/10125/44214

[42] van Zeeland, H., & Schmitt, N. (2013). Incidental vocabulary acquisition through L2 listening: A dimensions approach. *System*, *41*, 609–624. http://doi.org/10.1016/j.system.2013.07.012

[43] Vidal, K. (2003). Academic listening: A source of vocabulary acquisition? *Applied Linguistics*, *24*(1), 56–89. https://doi.org/10.1093/applin/24.1.56

[44] Vidal, K. (2011). A comparison of the effects of reading and listening on incidental vocabulary acquisition. *Language Learning*, *61*(1), 219–258. https://doi.org/10.1111/j.1467 9922.2010.00593.x

[45] Waring, R., & Takaki, M. (2003). At what rate do learners learn and retain new vocabulary from reading a graded reader. *Reading in a Foreign Language*, *15*(2), 130–163

[46] Webb, S. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics*, *28*, 46–65. http://doi.org/10.1093/applin/aml048

[47] Webb, S. (2009). The effects of receptive and productive learning of word pairs on vocabulary knowledge. *RELC journal*, *40*(3), 360–376. https://doi.org/10.1177%2F0033688209343854

[48] Webb, S. (2015). Extensive viewing: Language learning through watching television. In D. Nunan & J.C. Richards (Eds.), *Language learning beyond the classroom* (pp. 159–168). London: Routledge.

[49] Webb, S., & Chang, A. C. S. (2015). Second language vocabulary learning through extensive reading with audio support: How do frequency and distribution of occurrence affect learning? *Language Teaching Research*, *19*(6), 667–686. https://doi.org/10.1177/1362168814559800

[50] Webb, S., & Nation, P. (2017). *How vocabulary is learned*. Oxford University Press.

[51] Webb, S., & Paribakht, T. S. (2015). What is the relationship between the lexical profile of test items and performance on a standardized English proficiency test? *English for Specific Purposes*, *38*, 34–43. https://doi.org/10.1016/j.esp.2014.11.001

[52] Webb, S., Sasao, Y., & Ballance, O. (2017). The updated Vocabulary Levels Test: Developing and validating two new forms of the VLT. *ITL—International Journal of Applied Linguistics*, *168*, 34–70. https://doi.org/10.1075/itl.168.1.02web

[53] Zhang, P., & Graham, S. (2020). Learning vocabulary through listening: The role of vocabulary knowledge and listening proficiency. *Language Learning*, *70*(4), 1017–1053. https://doi.org/10.1111/lang.12411

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The Role of Study Habits in the Relationships Among Self-Esteem, Self-Control, and Academic Performance: The Case of Online English Classes

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Abstract—**This paper investigates the influences of self-esteem and self-control on Chinese students' academic performance taking online English classes. This paper also studies the role of study habits in the relationships among self-esteem, self-control, and academic performance. Data were gathered through validated instruments utilized in the past literature from the 103 Chinese students taking online English classes. Our findings reveal that higher self-esteem and self-control have positive and significant implications for academic achievement. Moreover, study habit mediates the relationship between self-esteem, self-control, and academic achievement. Lastly, the importance and relevance of the determinants of academic performance have been elaborated.**

Index Terms—**self-esteem, self-control, study habits, academic performance, online classes**

I. INTRODUCTION

Scholars considered many factors to determine academic performance. Students' academic achievement has an integral part in the teaching and learning process (Olutola et al., 2016). Its goal is to create an adequate intervention to foster success and keep away from failure in the academic context (Robbins et al., 2004). Some of the studies reflected on self-esteem, self-control, and study habit to predict academic performance. Even though existing studies were explaining the implications of different factors on academic achievement, students' variation of success remains (Stadler et al., 2016).

Self-esteem is one of the determinants of academic achievement (Baumeister et al., 2003; Leary et al., 1995). In the 19th century the concept of self-esteem was first put forward in the book of the Principles of Psychology by William James, the founder of functionalist psychology. He believed that self-esteem is the degree to which an individual achieves his ambition, and proposed a formula to express self-esteem, namely, self-esteem = success/ambition.

Self-esteem is an individual's judgment of self-worth, perception of self-ability and acceptance of the whole self (Rosenberg, 1965). Alves-Martins et al. (2002) mentioned that in the context of education, the study of self-esteem is essential to give a full explanation of students' behavior in various situations. It mirrors the self-worth evaluation of an individual (Leeson et al., 2008). The studies of scholars like Marsh and Craven have provided positive evidence.

Aside from self-esteem, self-control is another determining factor to explain academic performance. Learning self-control is the ability of students to consciously control their emotions, desires and behaviors according to social requirements and certain internal standards in order to achieve their academic goals in the learning process. Self-control relates to academic performance because it is an endless challenge for students to choose between study and entertainment. According to Duckworth et al. (2019), self-control refers to "the alignment of thoughts, feelings, and actions with enduringly valued goals in the face of momentarily more alluring alternatives." An individual can voluntarily control the automatic response to achieve long-term goals regarding its values and standards (Baumeister et al., 2007). Hence, students should resist short-term temptations and concentrate on achieving their long-term goal to obtain an academic degree. During this course, self-control plays an essential role in achieving positive outcomes, desirable social conduct, and educational achievements (De Ridder et al., 2012).

Another determinant is study habit. Study habit is a common construct explaining academic performance. Study habits reflect on student engagement in the appropriate studying routines that occur in a conducive context (Crede & Kuncel, 2008). Those are typically students' means and behavior in planning their private studies outside the school hours to gain mastery of the subject matter (Azikwe, 1998). Students should observe the practical implication of study habits on academic performance to achieve great success at any education stage (De Escobar, 2009).

The past literature has augmented our knowledge and understanding of the factors affecting academic performance, such as self-esteem and self-control, particularly on the traditional and face-to-face mode of learning. However, these factors have limited explanations for students' academic performance in the online learning environment. Study habit is usually used as a predictor for schoolwork performance in the past literature. This construct might explain the link between self-esteem, self-control, and students' online learning achievements. In addition, as far as the researcher's knowledge, no published studies have investigated the relationship between self-esteem and self-control and academic

achievement when learning habits are used as an intermediary to explain this phenomenon. Hence, an empirical study was developed to address these gaps and contemplate: How do self-esteem and self-control relate to Chinese students' academic performance taking online English classes? Moreover, it reflects on: How does study habit influence self-esteem, self-control, and academic performance of Chinese students taking online English classes?

The present condition of the world due to the COVID-19 pandemic creates a new normal setting and wherein online classes are set up in the university. This action serves as a precautionary measure to avoid and minimize the transmission of the virus. This paper examines the effects of study habits on the relationship between self-esteem, self-control, and Chinese students' academic performance in their online English classes. Adapting to the new normal, this study conjectures that students' academic performance in their online classes depends on self-esteem and self-control and can be induced by the good study habits of students. This conjecture is motivated by the past literature's findings, which contemplated in the context of the traditional offline learning mode. Taking the students of Huaiyin Institute of technology as an example, this paper studies the participation in online English course of Chinese students. English is not the main language use by these students. Hence, this study conjectures that self-esteem implies their academic performance. Moreover, students are studying online facing the challenge of short-term temptations through the unlimited access of the internet, which can hinder the achievement of their long-term goal (De Ridder et al., 2012). Consequently, this study contemplates the beneficial impact of high self-control over the academic performance of these students.

The paper's remainder is organized as follows: Section 2 will review relevant literature regarding self-esteem, self-control, and academic performance, before developing hypotheses and outlining the conceptual framework. Section 3 will discuss the methodology and analysis applied. Section 4 will present and discuss results, while Section 5 will make a conclusion and provide recommendations for future studies.

II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This study contemplates the different theories explaining the phenomenon regarding self-control, self-esteem, study habits, and academic performance. Self-control is choosing an alternative that is more valuable than an immediate outcome with less value (Ainslie, 1975), and an individual with high-self-control could resist temptation because of recognizing the foregone benefits. On the other hand, self-esteem is another essential factor explaining academic achievement (Marsh et al., 2006). Leeson et al. (2008) mentioned that self-esteem is a channel for evaluating his self-worth. Based on social identity theory, Robinson and Tayler (1991) explained that students' low self-esteem could induce low academic achievement.

Furthermore, study habit is a way for the student to assess their efficiency. Ayodele and Adebiyi (2013) explained that good studying habit creates a favorable implication on academic performance. Ajzen (1991) explained this phenomenon through the theory of planned behavior, in which he stated that attitude and subject norms as well as perceived behavioral control jointly shape an individual's behavioral intentions and behaviors. These theories have been contemplated by scholars and advanced their research to explain the phenomena.

Previous literature explains that high self-esteem helps create better academic achievement. For instance, Alves-Martins et al. (2002) analyzed the strategies pursued to protect self-esteem and found that students' unsatisfactory academic performance can be explained by less good behavior in school. Another study has been conducted by Tremblay et al. (2000) and analyzed the strategies employed by underachievers to maintain their self-esteem at an acceptable level. Their study conjectures that optimistic self-representations maintain self-esteem in a non-academic slant of self-concept about the devaluation of academic ability. They also mentioned that younger students have less maintenance of self-esteem by devaluing education experiences. Di Giunta et al. (2013) explored personality characteristics, self-esteem, and self-efficacy as determinants of students' academic performance. Their findings revealed that conscientiousness, openness, and self-esteem were positively interlinked. These factors mediate the effect of individual conscientiousness and self-esteem, which have a favorable implication on students' academic performance.

On the other hand, Baumeister et al. (2003) explained that high self-esteem is not an indication of good performance. The-high self-esteem is one of the components in the outcome of good performance in school. They mentioned that students' low academic performance has an indirect implication about the feelings of personal devaluation. Their conjecture supports the notion of Leary et al. (1995) that high self-esteem is a global perception of an individual implicating in all domains of performance.

This study conjectures that high-self-esteem plays a beneficial role in students' academic performance taking online English classes. Hence, the following hypothesis was developed.

H1: Self-esteem has a positive and significant relation to academic performance.

Moreover, other literature explained the connection between self-control and academic performance. The previous findings revealed that higher self-control has a positive influence on academic performance. Stadler et al. (2016) analyzed the influence of self-control on students' education performance beyond their general cognitive ability. Their findings revealed that self-control holds an essential value to explain students' objective and subjective academic performances. Duckworth and Seligman (2005) revealed that high self-control positively affected academic performance and surpassed the effect of IQ. They mentioned that a significant factor for students lack in intellectual

potential is their failure in self-control. Regarding this phenomenon De Ridder et al. (2012) illustrated that self-control has a link to university and work performance.

This study conjectures that high-self-control has a beneficial impact on students' academic performance taking online English classes. Hence, the following hypothesis was developed.

H2: Self-control has a positive and significant relation to academic performance.

In this study, we conjecture that self-esteem and self-control imply Chinese students' study habits taking online English classes. Study habit is a skill that induces students' learning capabilities (Ahmed et al., 2018). Sherefat and Murthy (2016) mentioned that it is one of the essential issues in educational research. Hence, the following hypothesis was developed.

H3: Self-esteem has a positive and significant influence on study habits.

H4: Self-control has a positive and significant influence on study habits.

Furthermore, previous literature discussed the relation between study habits and academic performance. Sherafat et al. (2016) revealed that the study habits facilitate higher academic performance. Ahmed et al. (2018) studied the effect of self-esteem and study habit on students' academic performance and discovered that self-esteem and study habits have a positive and significant effect on academic performance. Aluede and Onolemhemhen (2001) examined the implication of study habit counseling on secondary school students' academic performance in the English language. Their findings showed that there would be an improvement in the academic performance of students when good study habits are ingrained in students. Alimohamadi et al. (2018) identified the effect of study habits on nursing students' academic achievement. Their result revealed that there is a positive relationship between study habits and academic performance. They mentioned that this issue should be contemplated by education authorities to evaluate the students' learning process.

This study conjectures that study habit has a beneficial impact on Chinese students' academic performance taking online English classes. Hence, the following hypothesis was developed.

H5: Study habit has a positive and significant relation to academic performance.

In the past literature, factors such as self-esteem and study habit have been used to explain academic achievement (Ahmed et al., 2018). Galla and Duckworth (2015) studied the influence of habit and self-control on positive life outcomes. They contemplated the mediating effect of habit on the phenomenon. They found that study habits mediate the influence of self-control on after class assignment completion, and two long-term academic outcomes measured objectively. In this study, we conjecture that study habit can explain the connection among self-esteem, self-control, and academic performance. We propose that one of the causes why students with higher self-esteem and better self-control with less effort has more significant academic performance in online learning due to their study habits. Hence, the following hypotheses were developed.

H6: Study habit mediates the relationship between self-esteem and academic performance.

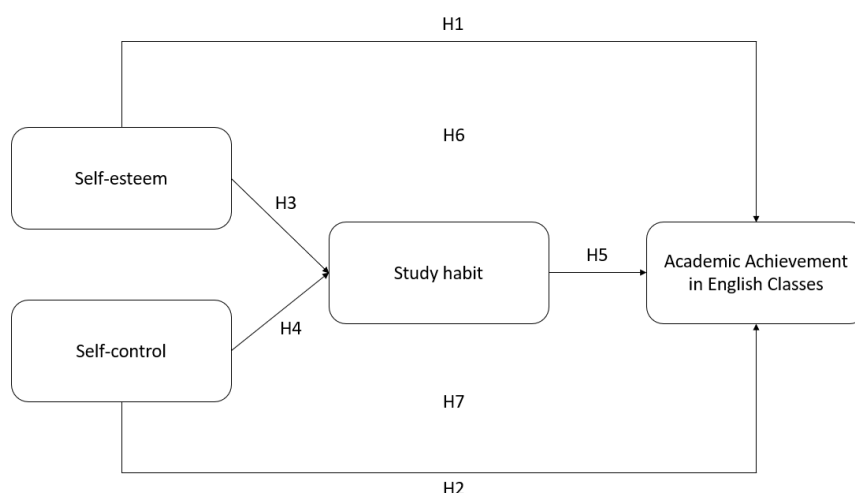H7: Study habit mediates the relationship between self-control and academic performance.

Figure. 1 Conceptual Framework

Figure 1 shows the conceptual framework of the study. It indicates the study's dependent variable, such as self-esteem and self-control, the dependent variable of the study, which is the academic performance of Chinese students taking English classes. Moreover, it shows the mediator variable of the study, which is the study habit.

III. METHODOLOGY

This study investigates the influences of self-esteem and self-control on Chinese students' academic performance taking online English classes. In addition, this study studies the role of study habit in the relationships among these variables. A descriptive research design was adopted. This study collects data from a sample of respondents to represent

and make a generalization on the study population. (what year level: year of 2018, school: Huaiyin Institute of Technology, country: China; the population of Chinese students in the university: over 20,000). In this study, a simple random sampling technique was employed to select the respondents.

In this study, the researcher arranges the survey instrument according to the objectives of the study. It is composed of scales to measure the study's independent variables, such as self-esteem and self-control and study habit for the mediator variable. The instrument has a designated section for academic performance in English classes, which serves as the study's dependent variable. The students' profiles, such as gender and the types of devices used in online learning, were also gathered and considered a control variable to avoid any other plausible explanations in testing the connection between the independent and dependent variables of the study.

Validated and reliable instruments were employed to measure the variables. Following the study of Ciarrochi et al. (2007) and Baumeister et al. (2003), the self-esteem scale (Rosenberg, 1979) was utilized. This scale estimates global self-esteem, which offers a general view of the self (Baumeister et al., 2003). They also mentioned the excellent reliability and validity of this scale. The Rosenberg self-esteem scale is the widely used self-report instrument in the field to evaluate individual self-esteem. In terms of self-control measurement, the modified version of the low self-control scale of Grasmick et al. (1993) by Rocque et al. (2013) was used. This scale contains 12 items with a four-point Likert-type scale of Strongly Agree, Agree, Disagree, and Strongly Disagree. Rocque et al. (2013) mentioned that this scale demonstrates enough estimate features and validity. Furthermore, this study adopts the study habit scale developed by Olutola et al. (2016), which comprises twelve items with a four-point Likert-type scale of Strongly Agree, Agree, Disagree, and Strongly Disagree. This questionnaire had a Cronbach's Alpha reliability coefficient of 0.81. The dependent variable of the study is academic performance. Richardson et al. (2012) mentioned that a grade point average (GPA) is the most commonly employed estimates of academic achievement because it measures various course assessments throughout a student's education journey. We calculate the average value of the four English classes as an estimate of academic performance.

An online survey was utilized to gather data from the students of the university. These data were arranged and analyzed to attain the objectives of the study. In the descriptive level, frequency, percentage, and mean were used. In the inferential level, this study employs multivariate regression to examine the association of self-esteem and self-control on academic performance and the mediating effect of study habit in the relationship among the variables. We include several factors as control variables that are known to affect academic performances, such as gender and the device used in online learning. We consider a dummy variable for these control variables and assign a 1 if the respondent is male and 0 otherwise. In addition, we assign a value of 1 if the device use is a personal computer or laptop, and 0, otherwise. Furthermore, this study follows Baron and Kenny's (1986) causal steps approach wherein the mediator variable regresses on the dependent variable. The dependent variable is regressed on the mediator and independent variables.

IV. RESULTS AND DISCUSSIONS

Table 1 shows the average values of each item per scale employed in this study. In terms of the self-esteem scale, Table 1 shows an average of 3.05 with a verbal interpretation of "agree," an indication that Chinese students taking online English classes have higher self-esteem. Items SE2, SE5, SE6, SE8, and SE9 are reverse scored. On the other hand, the low self-control scale shows an average of 1.47 with a verbal interpretation of "strongly disagree," indicating that Chinese students taking online English classes have higher self-control. Moreover, Table 1 shows that in terms of study habits, the mean value is 2.70, which indicates that the respondents have good habits in studying.

TABLE 1
DESCRIPTIVE STATISTICS PER ITEM OF SELF-ESTEEM, LOW SELF-CONTROL, AND STUDY HABIT SCALES

	Items	Average	Verbal Interpretation
	Self-esteem		
SE1	On the whole, I am satisfied with myself.	2.69	Agree
SE2	At times I think I am no good at all.	2.79	Agree
SE3	I feel that I have a number of good qualities.	2.46	Disagree
SE4	I am able to do things as well as most other people.	2.31	Disagree
SE5	I feel I do not have much to be proud of.	2.84	Agree
SE6	I certainly feel useless at times.	3.61	Strongly Agree
SE7	I feel that I'm a person of worth, at least on an equal plane with others.	3.65	Strongly Agree
SE8	I wish I could have more respect for myself.	3.68	Strongly Agree
SE9	All in all, I am inclined to feel that I am a failure.	4.00	Strongly Agree
SE10	I take a positive attitude toward myself.	2.45	Disagree
	Average	3.05	Agree
	Self-control		
SC1	I act on the spur of the moment without stopping to think	1.85	Disagree
SC2	I do whatever brings me pleasure here and now, even at the cost of some distant goal	1.86	Disagree
SC3	I'm more concerned with what happens to me in the short run than in the long run	2.39	Disagree
SC4	I like to test myself every now and then by doing something a little risky	1.88	Disagree
SC5	Sometimes I will take a risk just for the fun of it	1.23	Strongly Disagree
SC6	Excitement and adventure are more important to me than security	1.01	Strongly Disagree
SC7	I try to look out for myself first, even if it means making things difficult for other people	1.05	Strongly Disagree
SC8	If things I do upset people, it's their problem not mine	1.01	Strongly Disagree
SC9	I will try to get the things I want even when I know it's causing problems for other people	1.00	Strongly Disagree
SC10	I lose my temper pretty easily	1.85	Disagree
SC11	When I'm really angry, other people better stay away from me	1.17	Strongly Disagree
SC12	When I have a serious disagreement with someone, it's usually hard for me to talk calmly about it without getting upset	1.35	Strongly Disagree
	Average	1.47	Strongly Disagree
	Study Habits		
SH1	I always do my assignment on time	3.23	Agree
SH2	I always read my books even if there is no Exam	2.65	Agree
SH3	I read my book everyday	2.46	Disagree
SH4	I go through my books after every lesson	2.52	Agree
SH5	I always ahead of my teacher	2.50	Agree
SH6	I always have group discussion with my colleagues	3.15	Agree
SH7	I have a personal time table which I try to follow	2.60	Agree
SH8	I am not easily distracted by friends when it is time to study	2.69	Agree
SH9	When I miss anything while copying notes, I try to correct it immediately after the class	2.49	Disagree
SH10	I am easily distracted by noise or radio when it is time to study	2.99	Agree
SH11	I try to read other materials to get more information on the topics taught in the class	2.50	Disagree
SH12	I read my class work during holiday period	2.65	Agree
	Average	2.70	Agree

Table 2 indicates the summary statistics of the variable applied. Academic performance reveals a mean value of 3.36 which shows that majority of the respondents have B scores. Self-esteem, self-control, and study habits show 3.05, 1.47, and 2.70 mean values, respectively. Gender reveals a mean value of 0.74 whereas device use shows 0.33 mean value.

TABLE 2
SUMMARY STATISTICS

Variables	Mean	Median	Std. Deviation	Minimum	Maximum
Academic performance	3.36	3.25	1.14	1.00	6.00
Self-esteem	3.05	3.20	0.48	1.70	3.90
Self-control	1.47	1.42	0.15	1.33	2.17
Study habit	2.70	2.67	0.79	1.00	4.00
Gender	0.74	1.00	0.44	0.00	1.00
Device	0.33	0.00	0.47	0.00	1.00
N =103					

Table 3 presents the Pearson correlation coefficients between variables. We examine the correlation matrix to identify any strong relationships and determine any relations between the variables of interest and other variables that may cause multicollinearity in our subsequent regressions. The correlation matrix shows a strong correlation between self-esteem, self-control, and study habits. Hence, we conduct a separate regression analysis of each variable. In addition, Table 3 shows that academic performance has a positive correlation with self-esteem and study habits ($p < 0.01$), whereas academic performance shows a negative correlation with self-control at ($p < 0.01$).

TABLE 3
CORRELATION AMONG VARIABLES

	Academic performance	Self-esteem	Self-control	Study habit	Gender	Device
Academic performance	1.00					
Self-esteem	0.93***	1.00				
Self-control	-0.57***	-0.59***	1.00			
Study habit	0.97***	0.96***	-0.53***	1.00		
Gender	0.02	0.05	0.00	0.04	1.00	
Device	-0.25**	-0.25**	0.25**	-0.24**	0.09**	1.00

Note: ** indicates significance, two-tailed, at the 5% level; ***, indicates significance, two-tailed, at the 1% level.

Table 4 presents the multivariate regressions of the mediating effect of study habits on the relationship between self-esteem and academic performance. Table 4 shows that Self-esteem has a positive and significant relationship with academic performance ($p < 0.01$). This result supports the study's conjecture that students' higher self-esteem has beneficial implications on the academic performance of students taking online English classes, consistent with H1. In addition, Table 4 shows that self-esteem has a positive and significant effect on study habits ($p < 0.01$). This result supports the hypothesis of the study that students' higher self-esteem has beneficial implications on the study habits of students taking online English classes, consistent with H2.

Similarly, a positive and significant effect is revealed in the relationship between study habits and academic performance ($p < 0.01$). When study habits were controlled in the analysis of self-esteem and academic performance relationship, Table 4 shows that self-esteem has an insignificant effect. In contrast, study habits show a positive and significant effect on academic performance ($p < 0.01$). This outcome reveals that study habits fully mediate the relationship between self-esteem and academic performance, findings which accept H4. This result indicates that self-esteem has a relation to academic performance because of study habits, similar to Ahmed et al.'s (2018) findings.

TABLE 4
MULTIPLE REGRESSIONS OF THE MEDIATING EFFECT OF STUDY HABIT ON THE RELATIONSHIP BETWEEN SELF-ESTEEM AND ACADEMIC PERFORMANCE

	Academic performance	Study Habit	Academic performance	Academic performance
Self-esteem	2.20	1.57		0.10
	(25.09) ***	(33.73) ***		(0.47)
Study Habit			1.39	1.33
			(36.91) ***	(9.95) ***
Gender	-0.08	-0.02	-0.05	-0.05
	(-0.90)	(-0.50)	(-0.73)	(-0.76)
Device	-0.03	0.01	-0.05	-0.05
	(-0.36)	(0.28)	(-0.84)	(-0.78)
Constant	-3.26	-2.06	-0.36	-0.51
	(-11.60) ***	(-13.81) ***	(-3.01) ***	(-1.49)
F	227.02***	405.82***	488.51***	363.56***
Adjusted R²	0.87	0.92	0.93	0.93

Note: Values per column are the unstandardized coefficients, while t statistic values are in parenthesis. *** indicates significance, two-tailed, at the 1% level.

Table 5 presents the multivariate regressions of the mediating effect of study habits on the relationship between self-control and academic performance. Table 5 shows that self-control has a negative and significant relationship with academic performance ($p < 0.01$). This study reflects on the low self-control scale. Consequently, the lower the response of the students, the higher the effect on academic performance. This result supports the study's conjecture that higher self-control of students has beneficial implications on the academic performance of students taking online English classes, consistent with H5. In addition, Table 5 shows that self-control has a negative and significant effect on study habits ($p < 0.01$). This result supports the hypothesis that higher self-control of students has beneficial implications on the study habits of students taking online English classes, consistent with H6. However, a positive and significant effect is revealed in the relationship between study habits and academic performance ($p < 0.01$), which supports H3. When study habits are controlled in the analysis of self-control and academic performance relationship, Table 5 shows that self-control has a negative and significant effect. In contrast, study habits show a positive and significant effect on academic performance at ($p < 0.05$) and ($p < 0.01$), respectively. This outcome reveals that study habits partially mediate the relationship between self-control and academic performance, findings which support H7. This result indicates that self-control causes academic performance because of study habits and some other reasons.

TABLE 5
MULTIPLE REGRESSIONS OF THE MEDIATING EFFECT OF STUDY HABIT ON THE RELATIONSHIP BETWEEN SELF-CONTROL AND ACADEMIC
PERFORMANCE

	Academic performance	Study Habit	Academic performance	Academic performance
Self-control	-4.05	-2.61		-0.55
	(-6.41) ***	(-5.80) ***		(-2.51) **
Study Habit			1.39	1.34
			(36.91) ***	(31.46) ***
Gender	0.07	0.09	-0.05	-0.05
	(0.35)	(0.59)	(-0.73)	(-0.72)
Device	-0.29	-0.19	-0.05	-0.03
	(-1.41)	(-1.33)	(-0.84)	(-0.47)
Constant	9.36	6.54	-0.36	0.59
	(10.00) ***	(9.82) ***	(-3.01) ***	(1.49)
F	16.99***	14.08***	488.51***	387.48***
Adjusted R^2	0.32	0.28	0.93	0.94

Note: Values per column are the unstandardized coefficients, while t statistic values are in parenthesis. ** indicates significance. Two-tailed, at the 5% level; ***, indicates significance, two-tailed, at the 1% level.

V. CONCLUSIONS

This paper investigates the influences of self-esteem and self-control on Chinese students' academic performance taking online English classes. It also studies the role of study habits in the relationships among self-esteem, self-control, and academic performance. It conjectures that self-esteem and self-control positively affect academic performance, and study habit influences these relationships.

Our main findings reveal that self-esteem and academic performance have a positive relationship. Similarly, a positive relationship is present in the relationship between self-control and academic performance. These findings indicate that their representation of oneself and self-discipline have a beneficial impact on students' academic performance taking online English classes. This evidence is similar to the findings from the past literature. Moreover, good study habits show a positive influence on academic performance and influence the relationships among self-esteem, self-control, and academic performance. These findings suggest that the impact of high self-esteem on academic performance is caused by the good study habit of Chinese students taking online English classes. In contrast, study habits and other factors explain the relationship between high self-control and Chinese students' academic performance taking online English classes.

This study infers several implications based on our findings. The present study integrates study habit as a mediator variable to explain the phenomenon and address the gaps in the past literature. Theoretically, it advances the knowledge about the phenomenon in social identity theory, self-control theory, and the theory of planned behavior. Our evidence contributes to the cognizance of the determinants of academic performance in the context of online learning. Moreover, educational policymakers may contemplate the findings to formulate some action plan to help students enhance their academic performance, particularly classes held online. Future research about this issue may contemplate other factors and boundary conditions to understand better the implications of self-esteem and self-control on academic performance.

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REFERENCES

[1] Ahmed, O., Hossain, M. A., & Rana, M. S. (2018). Role of self-esteem and study habit on academic achievement of university students. *Bangladesh Journal of Psychology*, *21*, 81-92.
[2] Ainslie, G. W. (1975). Specious reward: A behavioral theory of impulsiveness and impulse control. *Psychological Bulletin, 82,* 463-496.
[3] Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.
[4] Alimohamadi N, Dehghani M, AlmasiS, AshtaraniE, Jonbakhsh F, Paymard A, Khalili A. (2018). Relation Study between Study Habit and Academic Performance of Nursing Students in Hamadan. *Pajouhan Scientific Journal. 16*(3): 29-38. DOI: 10.18869/psj.16.3.29
[5] Aluede and Onolemhemhen. (2001). Effect of Study Habit Counseling on the Academic Performance of Secondary School Students in English Language. *Journal of Educational Research and Extension, 38*(3), pp. 17-26.
[6] Alves-Martins, M., Peixoto, F., Gouveia-Pereira, M., Amaral, V., & Pedro, I. (2002). Self-esteem and academic achievement among adolescents. *Educational psychology*, *22*(1), 51-62.
[7] Ayodele, C.S. and Adebiyi, D.R. (2013). Study Habits as Influence of Academic Performance of University Undergraduates in Nigeria. *Research Journal in Organizational Psychology and Educational Studies, 2* (3), 72- 75.
[8] Azikwe, U (1998). Study Approaches of University Students. World Council of Curriculum and Instruction (WCCI), *Region II Forum, 2*:106-114.

[9]   Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173.

[10]   Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological science in the public interest*, *4*(1), 1-44.

[11]   Baumeister, R.F., Vohs, K.D., & Tice, D.M. (2007). The strength model of self-control. *Current Directions in Psychological Science, 16,* 351–355. Http: //dx.doi.org/10.1111/j. 1467-8721.2007.00534.x.

[12]   Choi, N. (2005). Self-efficacy and self-concept as predictors of college students' academic performance. *Psychology in the Schools, 42,* 197–205.

[13]   Ciarrochi, Joseph, Patrick CL Heaven, and Fiona Davies. (2007). "The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal study." *Journal of Research in Personality 41*, no. 6, 1161-1178.

[14]   Crede, M. and Kuncel, N.R (2008). Study Habits, Skills and Attitudes: The Third Pillar Supporting Collegiate Academic Performance. *Perspectives on Psychol. Sci. 3*(6): 425-453.

[15]   De Escobar, V.M. (2009). *Good Study Habits and Academic Achievement walk Hand in Hand.* Retrieved on 4th February, 2013 from: http://EzineArticles.com/expert/Venonica M._De_Escobar/11678

[16]   De Ridder, D.T., Lensvelt-Mulders, G., Finkenauer, C., Stok, F.M., & Baumeister, R.F. (2012). Taking stock of self-control: A meta-analysis of how trait self-control relates to a wide range of behaviors. *Personality and Social Psychology Review, 16*, 76–99. http://dx.doi. org/10.1177/1088868311418749.

[17]   Di Giunta, L., Alessandri, G., Gerbino, M., Kanacri, P. L., Zuffiano, A., & Caprara, G. V. (2013). The determinants of scholastic achievement: The contribution of personality traits, self-esteem, and academic self-efficacy. *Learning and individual Differences*, *27*, 102-108.

[18]   Duckworth, A. L., & Seligman, M. E. (2005). Self-discipline outdoes IQ in predicting academic performance of adolescents. *Psychological science*, *16*(12), 939-944.

[19]   Duckworth, A. L., Taxer, J. L., Eskreis-Winkler, L., Galla, B. M., & Gross, J. J. (2019). Self-control and academic achievement. *Annual Review of Psychology*, *70*, 373-399.

[20]   Galla, B. M., & Duckworth, A. L. (2015). More than resisting temptation: Beneficial habits mediate the relationship between self-control and positive life outcomes. *Journal of personality and social psychology*, *109*(3), 508-525.

[21]   Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime.* Stanford, CA: Stanford University Press

[22]   Grasmick, H. G., Tittle, C. R., Bursik Jr, R. J., & Arneklev, B. J. (1993). Testing the core empirical implications of Gottfredson and Hirschi's general theory of crime. *Journal of research in crime and delinquency*, *30*(1), 5-29.

[23]   GUO Mei-hua, ZHANG Ling-cong (2009). The Characteristics and the Causes of Students' Self-control of Learning. *Journal of Shanxi Datong University (Natural Science)*, *25*(5), 78-80, 96.

[24]   Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology, 68*, 518–130.

[25]   Leeson, P., Ciarrochi, J., & Heaven, P. C. L. (2008). Cognitive ability, personality, and academic performance in adolescence. *Personality and Individual Differences, 45*, 630–635. http:// dx.doi.org/10.1016/j.paid.2008.07.00.

[26]   Marsh, H. W., & Craven, R. G. (2005). A reciprocal effects model of the causal ordering of self-concept and achievement: New support for the benefits of enhancing self-concept. In H. W. Marsh, R. G. Craven, & D. M. McInerney (Eds.), *International advances in self research: New frontiers for self research* (Vol. 2, pp. 17–51). Greenwich, Connecticut: Information Age Publishing.

[27]   Marsh, H. W., Trautwein, U., Ludtke, O., Koller, O., & Baumert, J. (2006). Integration of multidimensional self-concept and core personality constructs: Construct validation and relations to well-being and achievement. *Journal of Personality, 74*, 403–456. http:// dx.doi.org/10.1111/j.1467-6494.2005.00380. x.

[28]   Olutola, A. T., Olatoye, O. O., & Olatoye, R. A. (2016). Assessment of Social Media Utilization and Study Habit of Students of Tertiary Institutions in Katsina State. *Journal of Education and practice*, *7*(3), 178-188.

[29]   Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic achievement: A systematic review and meta-analysis. *Psychological Bulletin, 138,* 353. http://dx.doi.org/10.1037/a0026838.

[30]   Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skills factors predict college outcomes? A meta-analysis. *Psychological Bulletin, 130,* 261–288. http://dx.doi.org/10.1037/0033-2909.130.2.261.

[31]   Robinson, W.P., & Tayler, C.A. (1991). Correlates of low academic achievement in three countries: England, France and Japan, *Ana lise Psicolo ǵica, 9*, 277–290.

[32]   Rocque, M., Tittle, C., & Zimmerman, G. M. (2013). Measuring up: Assessing the measurement properties of two self-control scales. *Deviant Behavior*, *34*(7), 534-556.

[33]   Rosenberg, M. (1979). *Conceiving the self.* New York: Basic Books.

[34]   Sherafat, R., & Murthy, C. G. V. (2016). A Study of Study Habit and Academic Achievement among Secondary and Senior Secondary School Students of Mysore City. *The International Journal of Indian Psychology, 3*(2), 161-170.

[35]   Stadler, M., Aust, M., Becker, N., Niepel, C., & Greiff, S. (2016). Choosing between what you want now and what you want most: Self-control explains academic achievement beyond cognitive ability. *Personality and Individual Differences*, *94*, 168-172.

[36]   Tremblay, M. S., Inman, J. W., & Willms, J. D. (2000). The relationship between physical activity, self-esteem, and academic achievement in 12-year-old children. *Pediatric exercise science*, *12*(3), 312-323.

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Metacognitive Knowledge in Performing a Speaking Task: A Report From High and Low Proficient Thai University Students

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Abstract—This study analyzes the use of metacognitive knowledge in performing a speaking task between high-proficient and low-proficient university students. The data was collected by employing stimulated recall interviews from 34-first year students. The data was coded deductively by using metacognitive knowledge frameworks. The results showed that the students employed all types of metacognitive knowledge in their speaking. Both high-proficient and low-proficient students prominently manifested strategy knowledge such as vocabulary strategies, planning strategies and problem-solving strategies. However, the high-proficient students were found to use some strategies differently from the low-proficient students. The high-proficient students showed the highest percentage of task knowledge, while the low-proficient students displayed the lowest percentage. The former group clearly showed understanding of the purpose, nature and difficulty of the task, which could influence the task management. Both groups exhibited person knowledge at a low percentage. While the high-proficient students were found to depict knowledge that facilitated their learning and speaking, the low-proficient students were concerned about variables such as limited vocabulary knowledge and grammatical deficiency that inhibited their learning and speaking. The finding implies the importance of raising metacognitive knowledge to accomplish learning tasks.

Index Terms—metacognitive knowledge, speaking task, vocabulary use, university students

I. INTRODUCTION

The ultimate goal of English language learning and teaching is to provide learners with the ability to use language to communicate effectively and correctly (Davies & Pearse, 2000). Among all language skills, speaking is perhaps the most essential skill that serves the learning goal for communicating in various situations. At a tertiary level, speaking is one of the key aspects of language skill assessments and speaking proficiency may include descriptions, discussions, and effective presentations. In addition, university students tend to perform speaking activities within a specific context as programs are on grounds of learners' needs and interests (Jin et al., 2013; Paltridge & Starfield, 2013). They are expected to achieve their academic and professional goal by combining acquired language knowledge and content knowledge (Douglas, 2000), together with specific knowledge of particular subjects (Feak, 2013). In this regard, learners need to combine both general and technical words to convey messages in specific contexts.

Nonetheless, second and foreign language learners generally find effective speaking challenging and difficult (Paquot, 2010). Besides, second language teachers accepted that developing the learners' speaking ability is an arduous task (Pawlak et al., 2011). This is because speaking does not only involve vocabulary knowledge from the speakers' lexicon (Nation, 2013; Zipagan & Lee, 2018) but also a mastery of language subsystems (Pawlak et al., 2011), consistency of practice (Burns, 2016), and familiarity of situations and variety of topics (Richards, 1976).

In the field of psychology education, researchers have investigated learners' metacognition and found that it has a direct impact on successful learning outcomes (Mokhtari & Reichard, 2002; Zimmerman & Schunk, 2001). Metacognition "has the potential to empower students to take charge of their own learning and to increase the meaningfulness of students' learning" (Amado Gama, 2005, p. 21). Metacognitive knowledge and skills are critical for learners to become successful (Altoik et al., 2019) because it fosters learners to learn what to do when they don't know what to do (Claxton, 2002). For this reason, it is interesting to investigate how university students employ their metacognitive knowledge to regulate their learning. This study, therefore, is designed to seek answers to the question "To what extent do high and low proficient students use metacognitive knowledge in a speaking task?"

II. LITERATURE REVIEW

A. Types of Metacognitive Knowledge

The concept of metacognition emerged in the late 1960s when Flavell studied the significance of metacognition and behaviors in children's memory development. Even though the term has subsequently been conceptualized by different scholars, the notion of metacognition lies in the heart that it is a key element to enhance and regulate successful learning. It deals with one's own thinking, information processing, learning goal, and management. In this study, we acknowledge its original definition by Flavell, (1976, p. 232) as "*one's knowledge concerning one's own cognitive processes and products or anything related to them.*" Studies of metacognition focus on the two components: knowledge of cognition and regulation of cognition (Flavell, 1979; Paris & Winograd, 1990; Schraw et al., 2006; Wenden 1998; White & Frederiksen, 2005). Knowledge of cognition or metacognitive knowledge refers to an individual's knowledge of one's own cognitive process, whereas regulation of cognition or metacognitive control refers to the process of regulating one's own learning based on metacognitive knowledge.

Metacognitive knowledge is essential for effective learning strategies (Wenden, 1998) and is influential to learning outcomes (Choyet al., 2019). Butler and Winne (1995) and Baker and Brown (1984, as cited in Wenden, 1998) argue that metacognitive knowledge is a prerequisite to self-regulation. This is probably because accurate self-assessment is the principal to effective self-regulation (Schoenfeld, 1987). Thus, learners who understand their thinking and learning processes can make choices or applications of strategies in planning, evaluating and monitoring pertaining to a learning task (Wenden, 1998; Zhang & Goh, 2006).

Metacognitive knowledge is divided into three categories: person knowledge, task knowledge and strategy knowledge (Flavell, 1979; Wenden, 1998; Vandergrift & Goh, 2012). Person knowledge is a part of our stored knowledge or our long-term memory that is acquired formally or informally, deliberately or incidentally and this knowledge is relatively stable (Flavell, 1979). In language learning, Wenden (1998) points out that person knowledge is learners' understanding of human factors that facilitate or inhibit learning; cognitive and affective factors such as age, beliefs, and motivation. This knowledge includes knowledge learners' proficiency in a given area such as reading skills, and grammatical knowledge, knowledge of learning efficiency and achievement beliefs. In listening, Vandergrift and Goh (2012) acknowledge person knowledge as knowledge of ourselves as learners and the beliefs we have about what leads to success or failure in learning (Vandergrift & Goh, 2012, p. 87). It can be summarized that person knowledge is knowledge of self-assessment towards a learning task. Task knowledge is knowledge about the purpose, the nature, and the demand of the task to be accomplished (Flavell, 1979; Vandergrift & Goh, 2012; Wenden, 1998). To clarify, knowledge of a task's purpose is understanding that a speaking task aims at improving an ability to orally describe something and it has a relationship with expanded vocabulary after task completion. Knowledge of the nature of a learning task is understanding that a speaking task is different from a writing task because it requires knowledge and skills of grammar, vocabulary, and pronunciation. Furthermore, knowledge of a task's demands is understanding that the task is probably challenging; as a result, knowledge and skills are deliberated for accomplishing a general task or a specific task. Strategy knowledge is knowledge about what strategies are, why they are useful, and when they should be used to complete a particular task. According to Flavell (1981), strategy knowledge happens during a learning process rather than a planning process. In some cases, however, learning strategies are considered strategy knowledge. This is because some data collecting techniques such as interviews and questionnaires retrospect upon participants' learning process which requires them to draw upon their stored metacognitive knowledge about learning strategies. As a result, strategies learners may use or what they think they use or should use - can also be viewed as evidence of their strategic knowledge (Wenden, 1998, p. 519).

B. Effects of Metacognitive Knowledge on Speaking Performance

A study of oral skill awareness of advanced EFL students by Droździal-Szelest (2011) showed a high degree of metacognitive awareness among them. They were able to assess their speaking abilities and realized the nature of the speaking task. According to Putri (2019), metacognitive awareness allowed the learners to reflect upon problem areas such as vocabulary, accuracy, and confidence that they faced in speaking. In addition, they were aware that communicative competence required combinations of various factors such as teachers, learners, environment and time. Another study by Karim (2019) revealed that learners who were aware of metacognitive knowledge of their English language background, difficulties in their learning, and learning resource access could apply these kinds of knowledge to accommodate metacognitive strategies – planning, monitoring, and evaluating, for developing their speaking skill.

Tan and Tan (2010) conducted a case study to examine a metacognitive approach for developing students' Chinese language speaking. The use of audioblogs as the mediating information and communication technology (ICT) tool was employed to facilitate language learning tasks. The main sources of data were from seven students' oral recordings and interactions in their audioblogs. The results revealed significant improvement in the mean scores of pre- to post-test oral performance. It was found that the systematic approach in their reflection: evaluating --> monitoring --> planning, was adopted with a greater amount of attention devoted to the monitoring strategy. However, the distribution of metacognitive knowledge usage revealed in students' self-assessment was unbalanced. Among the types of metacognitive knowledge, task knowledge was the metacognitive knowledge predominantly used by the students. On the other hand, person knowledge and strategy knowledge were not adopted by the students. The findings implied that more attention could be given to the person knowledge and strategy knowledge.

Previous studies reported positive relationships between awareness of metacognitive knowledge and speaking skills. Nonetheless, how learners employ metacognitive knowledge in their learning processes needs further inspection. Therefore, this study attempts to explore the use of metacognitive knowledge in oral production in both high and low proficiency university students. In addition, it is interesting to examine the metacognitive knowledge of EFL students in a task that is closely related to a specific context.

III. RESEARCH METHODOLOGY

A. Participants of the Study

The participants were first-year students who enrolled in the course Technical English, at King Mongkut's University of Technology Thonburi (KMUTT), Thailand. Their general English proficiency was assumed to be comparable to intermediate level. The participants were selected from fifteen different groups (418 students), and they were taught by different teachers. To examine the use of metacognitive knowledge in the speaking task between high- and low-proficient students, participants were obtained based on their scores of a speaking task. The criteria of speaking assessment include content, language accuracy, fluency and one-minute time required to complete the task. In this process, the researchers asked for the names of the six students regarding their speaking scores. In other words, only extreme cases were focused. That is to say, three students who gained the highest scores and three students who gained the lowest scores from each group were singled out. Then, the researchers made contact with each student (90 students in total) for permission to an interview. However, the students were not informed about their gained scores. In the end, 34 students voluntarily took part.

B. Speaking Task

The speaking task was a requirement of Technical English. The course aims to develop English communication skills. Particularly, the course focuses on the use of skills in meaningful communicative tasks in academic and technological contexts. In line with the aim of the course, students are required to accomplish a task, which is an oral report of a situation on the topic of safety at the workplace. There were five different pictures and the students were allowed to prepare in advance. The task is a one-minute picture description and the students should report the situation according to the guidelines, which includes the scene, the equipment or materials appearing in the pictures, potential accident and safety. On the actual task performance, each student randomly picked one picture, prepared the speaking for one minute and performed it. During the task performance, the students' speech was audio recorded for the stimulated recall interview process.

C. The Interviews

In order to explore the use of metacognitive knowledge in a speaking task, a stimulated recall interview was employed to draw the students' thinking when they were doing a task. The interview questions were designed based on the students' considerations for performing the task. The interviews were conducted one week after the speaking task. As the participants were high- and low-proficient students, the interviews might allow the researchers to see how different metacognitive knowledge was used between the two groups. The interview was conducted individually one week after the speaking task. The time and venue were set according to the availability of the interviewee, and they were asked to participate in the interview outside the classroom. Prior to the interview, each of the participants gave the researchers consent for data collection.

D. Coding

To analyze the data, the schemes for coding were set by adapting Flavell's (1979), Wenden's (1998), and Vandergrift and Goh's (2012) metacognitive knowledge frameworks. Table 1 illustrates person knowledge, task knowledge, and strategy knowledge that could influence an outcome of a speaking task. Person knowledge is knowledge of one's self as a learner and EFL speaker. It can be reflected through students' understanding of self-proficiency in their learning in general and speaking in particular. This also includes self-beliefs and attitudes, cognitive ability and styles in learning. Task knowledge is knowledge of the task's purpose, nature, and demand. Strategy knowledge involves knowledge about what strategy, when to use, and why it could be effective for task completion.

TABLE 1
MODIFIED SCHEMES FOR CODING METACOGNITIVE KNOWLEDGE IN SPEAKING AND EXAMPLES FROM THE STUDENTS' INTERVIEWS

Variables of metacognitive knowledge	Metacognitive knowledge	Metacognitive knowledge about speaking	Examples of metacognitive knowledge of students
Person knowledge	• Beliefs or perceptions about the nature of learning and proficiency of oneself and others. • Beliefs about what leads to success or failure in learning. • Knowledge of the cognitive and affective factors that facilitate or inhibit learning.	• Knowing one's self and others in terms of strength and weakness in learning and cognitive processing in general, e.g., how good their memory is, how they learn the language • Learning styles, e.g., one may prefer understanding to memorize • Beliefs and attitudes towards speaking, e.g., perception towards learning and speaking English • Knowing their own language proficiency and speaking proficiency in general such as how well they can speak, how much grammar they know	1. I was not confident about the part of speech of the vocabulary because I am not good at grammar. 2. Most of my friends prepare the scripts, but I don't like to memorize them. I don't like reading it from the script.
Task knowledge	• Information available to the students during a cognitive enterprise. • Knowledge of the nature and purpose of the task and how it will serve their language learning needs. • Knowledge of task demands.	• Knowledge and skills acquired from accomplishing the speaking task, e.g., the oral ability for describing the task, target vocabulary and knowledge of language structure for describing damages • Knowledge and skills needed for completing the task e.g. vocabulary • Needed, sentence points and structures, source of information for the task processing • Mental, affective factors towards speaking task, e.g., level of task difficulty • Factors that influence speaking e.g. nature of the task, time constraints and scores	1. I tried to recall what I have learnt in the class and remembered that we studied about "safety". 2. I focused on what related to the topic "safety" because it could be the criteria of the scores.
Strategy knowledge	• Knowledge concerning effective strategies for accomplishing a task. • Knowledge about what strategies are, why they are useful and specific knowledge about when and how to use them.	• Knowledge or actions of 'what' is useful for accomplishing a speaking task, e.g., what a student does or should do in order to achieve the speaking task • Knowledge or awareness of 'why' such strategies are helpful for accomplishing the speaking task • Knowledge or actions of 'how' to employ strategies for the speaking task attainment • Knowledge or actions of 'when' the strategies should be regulated	1. I wrote a script and checked the structures and vocabulary. I checked whether a word looked strange in the context or were there any other words. I studied how they were used. 2. I used the Thai language to search for vocabulary in English. I typed my sentences in Google to check if other people used the same sentences or not.

The schemes based on Flavell (1979); Wenden, (1998) and Vandergrift and Goh, (2012)

In the next step, metacognitive knowledge was coded deductively (see Table 1). In the coding process, two researchers familiarized the data by reading and re-reading the interviews data. Then, specific words or phrases relating to the descriptions of person knowledge, task knowledge, and strategy knowledge were pinpointed. For example, the phrase *I am not good at speaking was* coded PK (Person knowledge) as it described a belief of specific skills that the participant self-assessed. Then, phrases and keywords of each type of metacognitive knowledge were examined and grouped into broader categories to capture the meaningful themes. The researchers conducted the intra- and inter-reliability checks. To explain, the data was coded by the same researchers and two experts in the fields. Subsequently, the agreement is 92 percent, indicating high reliability.

IV. RESULTS

A. Types of Metacognitive Knowledge in the Speaking among University Students

Table 2 shows types of metacognitive knowledge used in speaking among EFL university students. As can be seen, strategy knowledge was prominently elicited with the highest percentage (54%), followed by task knowledge (30%), whereas person knowledge was least frequently produced (16%).

TABLE 2
TYPES OF METACOGNITIVE KNOWLEDGE IN PERFORMING A SPEAKING TASK BY THAI UNIVERSITY STUDENTS

Types of metacognitive knowledge	Numbers of occurrences	Percentage
Person knowledge	60	16%
Task knowledge	111	30%
Strategy knowledge	202	54%
Total (occurrences)	373	100%

Table 3 displays percentages of metacognitive knowledge between the high-proficient students and the low-proficient students. It is noticeable that the high-proficient students were able to reflect higher percentages on all types of metacognitive knowledge than the low-proficient students. Among the three types of metacognitive knowledge, 70 percent of task knowledge, 56 percent of strategy knowledge, and 55 percent of person knowledge were reported among the high-proficient students. At the same time, the low-proficient students elicited 45 percent of person knowledge, 44 percent of strategy knowledge and 30 percent of task knowledge. Among these types of knowledge, task knowledge demonstrated the greatest difference between the two groups

TABLE 3
METACOGNITIVE KNOWLEDGE IN A SPEAKING TASK BETWEEN HIGH AND LOW PROFICIENT STUDENTS

Types of metacognitive knowledge	Person knowledge		Task knowledge		Strategy knowledge	
	Numbers of occurrences	Percentage	Numbers of occurrences	Percentage	Numbers of occurrences	Percentage
High-proficient students	33	55%	78	70%	113	56%
Low-proficient students	27	45%	33	30%	89	44%
Total	60	100%	111	100%	202	100%

Subsequently, themes of each type of metacognitive knowledge emerged. Under person knowledge, three themes have been found. The first theme is recognizing self-proficiency which reflects students' assessment of their language and skill such as grammar knowledge, vocabulary knowledge, speaking ability and pronunciation knowledge. The second theme is knowledge of self-beliefs and attitudes towards learning and speaking. The last is understanding of one's own and others' cognitive ability. There are four themes under task knowledge: knowledge of task purpose, nature of the task, task difficulty and other factors that can affect the task completion. Strategy knowledge consists of five elements covering knowledge of vocabulary strategy, planning strategy, problem-solving strategy, rehearsing strategy and evaluating strategy. The themes of each type of metacognitive knowledge between the two groups are shown in Table 4.

TABLE 4
THEMES OF METACOGNITIVE KNOWLEDGE IN THE SPEAKING TASK BETWEEN HIGH AND LOW PROFICIENT STUDENTS

Types of metacognitive knowledge	High-proficient students	Low-proficient students	Total
1. Person knowledge	**33**	**27**	**60**
1.1 knowledge of self-proficiency	13 (50%)	13(50%)	26
1.2. knowledge of self-beliefs and attitudes	5 (50%)	5 (50%)	10
1.3. knowledge of one's own and others' cognitive ability	15 (62.5%)	9 (37.5%)	24
2. Task Knowledge	**78**	**33**	**111**
2.1 knowledge of task purpose	56 (67%)	27 (33%)	2
2.2. knowledge of the nature of the task	8 (89%)	1 (11%)	9
2.3 knowledge of task difficulty	12 (80%)	3 (20%)	15
2.4. knowledge of other factors that can affect the task completion	2 (50%)	2 (50%)	4
3. Strategy Knowledge	**113**	**89**	**202**
3.1 knowledge of vocabulary strategies	20 (74%)	7 (26%)	27
3.2 knowledge of planning strategies	31 (55%)	26 (45%)	57
3.3 knowledge of problem-solving strategies	44 (51%)	42 (49%)	86
3.4 knowledge of rehearsing strategies	13 (54%)	11 (46%)	24
3.5 knowledge of evaluating strategy	5 (62.5%)	3 (37.5%)	8
Total	**224**	**149**	**373**

B. The Use of Metacognitive Knowledge between High and Low Proficiency Students

1. Person Knowledge

In order to perform a speaking task, the students show that they were conscious about themselves in terms of self-proficiency, self-beliefs and attitudes, and knowledge of self-beliefs and attitudes.

a. Knowledge of Self-proficiency

Examination of self-proficiency revealed that the high-proficient students were found to self-assess vocabulary knowledge or lexicon which easily helps make choices of vocabulary to complete the task. On the contrary, the low-proficient students showed severity in learning proficiency and speaking. This indicates that they may have receptive vocabulary knowledge, but may lack productive vocabulary knowledge.

high-proficient student	*I check my vocabulary, how much vocabulary I know in the picture. S2*
low-proficient students	*I didn't use the guideline from the teacher because I know that in the end, I will think in Thai when I have the test, so I wrote the script in Thai. S31*

b. Person knowledge of Self-beliefs and Attitudes

The finding revealed that the students were able to reflect beliefs and attitudes towards the speaking task. The high-proficient students assessed their learning ability in more positive ways than the low-proficient students. It is noticeable that the first group had self-efficacy beliefs to attain the task. On the contrary, low-proficient students had low confidence and belief to achieve the task due to grammar proficiency. The findings revealed that learners' perceptions towards learning foreign languages can affect vocabulary selection for their speaking.

high-proficient students	*Well, I think even though there are mistakes, the vocabulary that I used is appropriate and understandable. I am quite satisfied with it. S22*
low-proficient students	*I had no confidence that my English script was grammatically correct. S6*

c. Knowledge of One's Own and Others' Cognitive Ability

Another aspect of person knowledge elicited among university students is recognition of one's own and others' cognitive abilities and learning styles. High-proficient students were found to be aware of the way that they can learn best, which may be different from their friends. When performing a speaking task, they tended to regulate the way that matched their cognitive ability. In contrast, despite low-proficiency students' understanding of learning differences, they did not elicit clearly how it influenced different choices of controlling their speaking.

High-proficient student	*Most of my friends prepare the scripts, but I don't like to memorize them. I don't like reading it from the script. S22*
Low-proficient students	*I think the friends who are studying engineering are familiar with vocabulary about "construction sites", but I study Math. I don't usually study this topic nor use this kind of vocabulary. S 28*

2. Task Knowledge

In order to accomplish the speaking task, the students elicit task knowledge which includes the task purpose, task nature, task demand and other factors that can affect the task.

a. Knowledge of Task Purpose

As prompted in the interview, both groups of students were aware of the purpose of the task. To explain, high-proficient students analyzed the main message of the description and came up with target vocabulary and language structures. Similarly, low-proficient students studied details in the picture and potential consequences. The findings can be implied that task knowledge could help students to make word choices that embrace the main message of the task.

high-proficient students	*I looked at the five pictures at the same time and pondered what they had in common such as they are not allowed to do something. S7*
low-proficient students	*I looked for the meanings of vocabulary. I used Google and other search engines. I checked the one that is the most sensible to serve the purpose and the context of the task. S20*

b. Knowledge of Nature of the Task

Understanding the nature of the task is essential for students to become aware of the specific knowledge and skills they should gain. The findings showed that both groups show an understanding of the nature of the speaking task. However, high-proficient students appeared to take into consideration the connection of task and skills needed, task type and vocabulary to be used in the speaking task.

high-proficient students	*For this task, I worried about grammar, not vocabulary. But I didn't recheck it because I think it is a speaking task, vocabulary is more important. S18*
low-proficient students	*I think that when I perform the speaking, I would try to think in English so that it would not sound like memorizing the script. S 32*

c. Knowledge of Task Difficulty

Due to the context of the task which is relatively technical, the students understand that it was not easy to achieve it. In the speaking task, high-proficient students were conscious of levels of task difficulty and the context. One student (S27) realized that he needed to utilize vocabulary from the course book to serve the context of the task. Another student elicited that vocabulary items in her speaking were determined by the context of the task, especially words for

describing tools. On the other hand, low-proficient students found that the task was demanding. However, they could not show a clear understanding of how the context shaped the vocabulary needed for this task.

| high-proficient students | *Even though I employed some vocabulary from the book, I think the task is more complex than what we learned in the class.S27* |
| low-proficient students | *When preparing the task about this picture, I struggled with vocabulary (stumble, trip). I used an online dictionary to look for English vocabulary. S33* |

d. Knowledge of Other Factors that Can Affect the Task Completion

Aside from previous factors, the students were able to recognize there exist other factors that could also affect the speaking task. High-proficient students expressed that the amount of time given for the speaking task may affect their speaking. Thus, they needed to limit information in the description. In addition, different pictures seemed to be another factor that could impact choices of vocabulary use in the description. Consequently, the students were likely to employ easy-to-memorize words in their descriptions.

| high-proficient students | *Before I did the speaking task, I prepared it by taking notes about the scope of the talk. I consider the amount of time for speaking. S22* |
| low-proficient students | *When I prepare vocabulary, I go for words that are easy to memorize like the word "helmet" is easy to memorize because there are five pictures. I don't know which I will pick. S28* |

3. Strategy Knowledge

To reach the final product of the task, the students were found to be thoughtful of several ways of task management. Both groups had relatively high metacognitive knowledge ranging from vocabulary, to planning, problem-solving, rehearsing, and evaluating, which seemed effective to achieve their speaking.

a. Knowledge of Vocabulary Strategies

Based on the finding, students were aware that vocabulary is essential for speaking. In this regard, high-proficient students were able to reflect knowledge of vocabulary strategy which emphasizes vocabulary from their mental lexicon. To perform, they relied upon their lexicon as the main vocabulary source. In a similar vein, low-proficient students chose stored vocabulary and focused on simple words to carry the direct message in the talk. Moreover, some students managed to avoid using words they cannot pronounce correctly.

| high-proficient students | *I used it ("sewer") because I am familiar with these words, but I know both ("sewer" and "drain"). S3* |
| low-proficient students | *If I have a problem with vocabulary, if I cannot pronounce it clearly or correctly, I avoid using that word. S28* |

b. Knowledge of Planning Strategies

The planning strategy is unavoidable for students to attain the speaking specifically when description should serve the learning purposefully and contextually. The findings demonstrated that the students employed different approaches to manage their ways to speak. Knowledge of planning strategies helps them arrange the scope of the talk, make use of guidelines, take notes and make a list, prepare scripts and translate scripts. High-proficient students addressed that they were engaged with translating the scripts, arranging ideas, and taking notes/making a list of what information they should present in the speaking. On the other hand, low-proficient students addressed that they were occupied with preparing scripts in Thai and translating them into English.

| high-proficient students | *First, I looked at the picture and made a list of vocabulary in the Thai language. I listed the objects that I saw in the picture. S26* |
| low-proficient students | *I studied what happened in the scene, prepared the script in Thai and translated the Thai script into English. S29* |

c. Knowledge of Problem-solving Strategies

Due to the task difficulties, university students exhibited how they could get the problems resolved. However, it is noted that difficulties depend on individuals' perceptions; for this reason, different types of solutions were deployed. Both high-proficient and low-proficient students relied heavily on technology, namely online dictionaries and machine translation in seeking resources to cope with their problems. Both groups were found to have similar strategies for rechecking the correct meaning of vocabulary. However, some discrepancies of employed strategies were found between the two groups. Secondary to utilizing technology, high-proficient students center their attention to deal with the task by themselves. In contrast, low-proficient students managed to deal with difficulties by seeking help from friends or teachers.

| high-proficient students | *I used some words from the book, but it's not enough. I have to use other sources to get the vocabulary for describing this picture. S26* |

| low-proficient students | *I used Google Translation to translate the whole Thai script. S21* |

d. Knowledge of Rehearsing Strategies

The students were found to understand that practice was the best policy to perform a speaking. However, this knowledge was applied in different ways by two groups. To clarify, high-proficient students employed strategies that are applicable for the actual speaking when they practiced. For instance, only keywords were emphasized in the rehearsal although rote memorization of the full scripts was another option. In contrast, low-proficient students were found to be generally overwhelmed with memorizing the full scripts, despite the fact that some of them tried to focus on keywords.

| high-proficient students | *When I practiced, I memorized keywords. After that, I tried to recall details about that picture. S16* |
| low-proficient students | *When I practiced, I memorized the script and practiced a lot. S19* |

e. Knowledge of Evaluating Strategy

Lastly, university students were found to have knowledge of evaluating the effectiveness of their speaking strategies. Self-evaluation can impact levels of self-confidence or self-efficacy in achieving the task. The findings showed that revision and source of vocabulary use in the speaking allowed high-proficient students to evaluate how successful the task attainment is. In contrast, one of the low-proficient students mentioned that the details in some pictures were not clear enough, so there was a limited degree of certainty that their description would be reasonably understandable.

| high-proficient students | *I would say I was 70-80% confident about the vocabulary that I used to describe this picture. I think it was comprehensible because some of it was from the course book. S17* |
| low-proficient students | *When I prepared the task, I would say about 60-70% of my description is understandable. This is because I felt that there is not enough information to talk about in this picture. S19* |

V. DISCUSSION

This section discusses types of metacognitive knowledge used in performing a speaking task by high-proficient and low-proficient students. The discussion starts with person knowledge, task knowledge and strategy knowledge respectively.

A. Person Knowledge

Studies of Droździal-Szelest (2011) and Putri (2019) suggested that proficient learners were able to assess their speaking ability, difficulty, confidence and nature of speaking tasks. In this study, both high-proficient and low-proficient students were able to assess person knowledge in three different aspects: knowledge of self-proficiency, self-beliefs and attitudes, and knowledge of one's own and others' cognitive ability. These aspects of person knowledge influence vocabulary selection for their speaking performance. To clarify, when students were able to assess their language proficiency in terms of English language learning and speaking, they realized what vocabulary they already know and what words they need to gain in order to accomplish the task. In addition, beliefs and attitudes towards language learning and speaking influence word choices for speaking. One possible explanation is that, if the students find English language and speaking difficult, they are likely to select vocabulary that they think could help gain a higher score. This alternative can be affected by another aspect which is understanding of cognitive ability. That is when the students understand that their own cognitive ability differs from their friends, those students relatively select vocabulary based on their cognitive memory, which is to avoid using unknown or unfamiliar words. However, the findings of this current study show different perspectives of person knowledge between high-proficient and low-proficient students. To elaborate, high-proficient students could assess themselves in the ways that person knowledge facilitated their learning and speaking. For example, one student expressed that he/she understood that using difficult words in their description was uncomfortable because there is a possibility to otherwise forget them. In another example, one student recognized that their learning style was different from that of their friends, so when they prepared the speaking task, he/she employed strategies that matched his/her learning style and facilitated task achievement. On the other hand, albeit low-proficient students were able to be aware of themselves as English language learners, depictions of their language proficiency, beliefs about learning, and factors are found to relatively inhibit them from learning and speaking. In their reflections, they depicted themselves to be overwhelmed with cognitive-affective variables such as a low level of self-efficacy due to limited vocabulary knowledge and grammatical deficiencies. For instance, one addressed that he/she was not good at speaking English, and another admitted that he/she was uncertain to be able to perform the one-minute speaking.

B. Task Knowledge

Among the three types of metacognitive knowledge, task knowledge could be noticeable to differentiate high-proficient students from low-proficient students. It is necessary to highlight how high-proficient students employ task knowledge to manage their learning outcomes. The results were in line with Tan and Tan (2010), that task knowledge was dominantly used in speaking. Based on the findings, high-proficient students were found to be more knowledgeable regarding the purpose and nature of the speaking task, and difficulties of speaking task and when a deliberate effort is needed to accomplish the task. In other words, high-proficient students appeared to comprehend the task's content such as an accident in the workplace, safety and prevention, vocabulary such as *laboratory*, *contaminate*, and *fatal* and their relationship to the task's topic or purpose. In addition, understanding levels of task difficulty made them realized that vocabulary choices are shape by their context. For example, they expressed that they needed to supply themselves with a range of technical words such as *circuit*, *chainsaw*, *screwdriver* and *hazard* to serve the meanings and clarification of the description. Unlike high-proficient students, low-proficient students were found to understand and employ task knowledge superficially. Even though they could address the purpose of the task, they were not able to describe a deep understanding of nature or the difficulty of the task. For example, one student expressed that he/she was trying not to memorize the script when speaking. Another student reported that he/she encountered vocabulary difficulty in speaking, but did not explain the relationship between the task and vocabulary in context.

C. Strategy Knowledge

The findings revealed that strategy knowledge is prominently used in the speaking task as previous studies reported in the literature (see Droździal-Szelest, 2011; Karim, 2019; Putri, 2019). This could be explained by the nature of the task. As the task requires the students to describe situations relating to safety in the workplace within one minute, students must perform the speaking purposefully and meaningfully. To serve the task meaningfully, students should have sufficient resources/sources of strategies for effective speaking performance. In addition, they have to understand how and when such strategies should be used. One strategy includes using the first language (Thai) to plan the content of the talk and frame details of speaking. Another is selective attention, which helps students understand the purpose of a task before opting for key information to perform the speaking. Consequently, the students make use of technology to ascertain the appropriateness of vocabulary use. They increased the level of their vocabulary accuracy and precision by cross-checking their meanings from different sources. However, preparing the speaking for five different pictures, one of which they would randomly pick up, can affect their cognitive load. Thus, recognition of strategy knowledge aids students in managing the task more effectively by spending less (saving) time on some pictures or choosing familiar words to reduce cognitive loads. Finally, a variety of rehearsal strategies helped establish fluency in their speaking. The findings of the current study are in line with Cerón Sánchez et al. (2015) that strategy knowledge about speaking involves direct analysis, transformation, or synthesis of the target language, and at the same time, the use of these strategies helps them acquire the target or needed vocabulary.

VI. CONCLUSION AND IMPLICATIONS

This study examined the use of metacognitive knowledge in speaking among Thai university students. Metacognitive knowledge plays a critical role in accomplishing a learning task. Person knowledge provides the students with different angles of language learners, and it can help reflect the distance between the task and their ability to reach it. At the same time, strategy knowledge can be used to direct choices of task management such as planning, problem-solving and rehearsing based on available sources. Nonetheless, task knowledge seems to be a key for successful task attainment among the high-proficient students as this type of knowledge helps them place their concerns on what kind of task they were going to perform, what kind of vocabulary they need to use in the task, and what difficulties they are going to meet.

The findings of this study imply raising awareness of the use of metacognitive knowledge to accomplish a speaking task successfully. Despite the fact that both high-proficient and low-proficient students were able to use metacognitive knowledge as resources of information for accomplishing the speaking task, it is essential for the low-proficient learners to promote task knowledge in order to attain it successfully. To do so, metacognitive awareness should be trained at the very first stage of a learning task. As suggested by Goh and Burns (2012) and Burns (2019), teachers may need to highlight the importance of task preparation, thus students have enough time to prepare themselves to meet requirements of a learning task. This provides opportunities for learners to reflect upon their proficiency, beliefs, cognitive ability, the task they are going to perform, and the strategies needed for approaching the learning task. In addition, task knowledge should be raised in order to help students engage with the context and language use in a task. For specialized contexts, they are expected to demonstrate a fluent use of language, which is relatively technical (Coxhead, 2013). Therefore, they need a precise and deep understanding of vocabulary and language patterns to attain their academic and professional goals.

REFERENCES

[1] Amado Gama, C. (2005). *Integrating Metacognition in Interactive Learning Environments* [Unpublished doctoral dissertation]. University of Sussex.

[2]   Altıok, S., Başer, Z., & Yükseltürk, E. (2019). Enhancing metacognitive awareness of undergraduates through using an e-educational video environment. *Computers & Education, 139,* 129-145. https://doi.org/10.1016/j.compedu.2019.05.010.

[3]   Burns, A. (2016). Teaching speaking: Towards a holistic approach. In *25th ETA-ROC Anniversary Conference: Epoch Making in English Language Teaching and Learning. Taiwan: Chien Tan Overseas Youth Activity Center, November*. Retrieved May 29, 2020 from https://www.researchgate.net/profile/Anne_Burns6/publication/314545785_Teaching_speaking_Towards_a_holistic_approach/links/58c3422e92851c0ccbf145bc/Teaching-speaking-Towards-a-holistic-approach.pdf

[4]   Burns, A. (2019). Concepts for teaching speaking in the English language classroom. *LEARN Journal: Language Education and Acquisition Research Network*, *12*(1), 1-11.

[5]   Butler, D.L. & Winne, P.H. (1995). Feedback and self-regulated learning: A theoretical synthesis, *Review of Educational Research*, *65*(3), 245-281.

[6]   Cerón Sánchez, H. S., Lovos Hernández, P. A., Henríquez Girón, L. A., & Sánchez Flores, J. A. (2015). *The use of metacognitive learning strategies and their influence on speaking proficiency of third-year students from the English teaching major at the Department of Foreign Languages of The University of El Salvador during the year 2014.* [Unpublished doctoral dissertation] Universidad de El Salvador.

[7]   Choy, S. C., Yim, J. S. C., & Tan, P. L. (2019). Mediating effects of quality learning on metacognitive knowledge, metacognitive experience and outcomes. *Issues in Educational Research*, *29*(1), 1-18.

[8]   Claxton, G. (2002). *Building learning power*. London: TLO Ltd

[9]   Coxhead, A. (2013). Vocabulary and ESP. In B. Paltridge, & S. Sarfield, (Eds.), *The handbook of English for specific purposes*, (pp. 115-132). John Willey & Sons Inc.

[10]   Davies, P., & Pearse, E. (2000). *Success in English Teaching: A Complete Introduction to Teaching English at Secondary School Level and Above*. Oxford University Press.

[11]   Douglas, D. (2000). *Assessing languages for specific purposes*. Cambridge University Press.

[12]   Droździal-Szelest, K. (2011). Oral Skills Awareness of Advanced EFL Learners. In M. M. Pawlak, E. Waniek-Klimczak, & J. Majer, (Eds.). *Speaking and instructed foreign language acquisition* (pp. 131-147). Multilingual Matters.

[13]   Feak, B. C. (2013). ESP and speaking, In B. Paltridge, & S. Starfield, (Eds.), *The handbook of English for specific purposes* (pp. 35-53). Wiley-Blackwell, West Sussex.

[14]   Flavell, J. H. (1976). Metacognitive aspects of problem solving. In L. B. Resnick (Ed.). *The nature of intelligence* (pp. 231–235). Erlbaum.

[15]   Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive developmental inquiry. *American Psychologist, 34,* 906–911. https://dx.doi.org/10.1037/0003-066X.34.10.906

[16]   Flavell, J. H. (1981). Cognitive monitoring. In W. P. Dickson (Ed.), *Children's oral communication skills*. (pp. 35-60). Academic Press.

[17]   Goh, C. C. M., Goh, C., & Burns, A. (2012). *Teaching speaking*. Cambridge University Press.

[18]   Hacker, D. J., Dunlosky, J., & Graesser, A C. (Eds.). (2009). *Handbook of metacognition in education*. Taylor & Francis.

[19]   Jin, N. Y., Ling, L. Y., Tong, C. S., Sahiddan, N., Philip, A., Azmi, N. H. N., & Tarmizi, M. A. (2013). Development of the Engineering Technology Word List for vocational schools in Malaysia. *International Education Research, 1*(1), 43-59

[20]   Karim, I. (2019). Enhancing the Speaking Skill Using Metacognitive Strategy. *LANGUA: Journal of Linguistics, Literature, and Language Education*, *2*(1), 23-32. http://dx.doi.org/10.17977/um046v3i1p12-16

[21]   Mokhtari, K., and Reichard, C. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, *94*, 249-259

[22]   Nation, I. S. P., (2013). *Learning Vocabulary in Another Language* (2nd ed.). Cambridge University Press.

[23]   Paltridge, B., & Starfield, S. (2013). *The handbook of English for specific purposes*. Wiley- Blackwell.

[24]   Paquot, M. (2010). *Academic vocabulary in learner writing: From extraction to analysis*, Bloomsbury Publishing.

[25]   Paris, S. G., & Winograd, P. (1990). How metacognition can promote academic learning and instruction. In B. F. Jones, & L. Idol, *Dimensions of thinking and cognitive instruction*, (pp. 15-51). Lawrence Erlbaum Association, Inc. Publisher.

[26]   Pawlak, M., Waniek-Klimczak, E., & Majer, J., (Eds.). (2011). *Speaking and Instructed Foreign Language Acquisition*. Multilingual Matter.

[27]   Putri, D. R. (2019). Facilitating the Development of Students' Metacognitive Awareness in Speaking through Self-Assessment. *EDULANGUE, 2*(2), 90-105. https://dx.doi.org/10.20414/edulangue.v2i2.1263

[28]   Richards, J. C. (2008). *Teaching listening and Speaking*. Cambridge *University* press.

[29]   Richards, J. C. (1976).The role of vocabulary teaching, *TESOL Quarterly*, *10*(1), 77-89.

[30]   Schoenfeld, A. H. (1987). What's all the fuss about metacognition. In A. H. Schoenfeld, *Cognitive Science and Mathematics Education*, (pp. 189-216), Lawrence Erlbaum Associates.

[31]   Schraw, G. (2006). Knowledge: Structures and Processes. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (pp. 245–263). Lawrence Erlbaum Associates Publishers.

[32]   Tan, Y. H., & Tan, S. C. (2010). A metacognitive approach to enhancing Chinese language speaking skills with audioblogs. *Australasian Journal of Educational Technology*, *26*(7).1075-1089. https://dx.doi.org/10.14742/ajet.1035

[33]   Vandergrift, L. and Goh, C.C. M. (2012) A Metacognitive Approach to Listening. In L. Vandergrift, & C. C. M. Goh (Eds.), *Teaching and learning Second language Listening: metacognition in Action*. (pp. 80-103). Routledge.

[34]   Wenden, A. L. (1998). Metacognitive knowledge and language learning1. *Applied linguistics, 19*(4), 515-537. https://dx.doi.org/10.1093/applin/19.4.515

[35]   White, B., & Frederiksen, J. (2005). A theoretical framework and approach for fostering metacognitive development. *Educational Psychologist*, *40*(4), 211-223. https://dx.doi.org/10.https://dx.doi.1207/s15326985ep4004_3

[36]   Zhang, D., & Goh, C. (2006). *Strategy knowledge and perceived strategy use: Singaporean students' awareness of listening and speaking strategies. Language Awareness, 15,* 199-219. https://dx.doi.org/10.2167/la342.0

[37] Zipagan, M, N., & Lee, K, R. (2018). Korean English learners' use of lexical bundles in speaking, *The Journal of Asia TEFL*, *15*(2), pp. 276-291.

[38] Zimmerman, B. J., & Schunk, D. H. (2001). *Self-regulated learning and academic achievement*. Mahwah, NJ: Erlbaum.

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Teachers' Perspectives on Foreign Language Acquisition and Mobile or Computer Assisted Language Learning: A Qualitative Study

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Abstract—The study underscores issues of teachers' perspectives, their understanding, awareness, utilization, and effectiveness of technological mediated mobile capabilities in foreign language acquisition (FLA). Seven teachers (FLA) from five nationalities were interviewed online, and the data collected and compiled along with notes were descriptively analyzed. The findings illustrate that although FLA teachers are ready to embrace changes and accept the usage of technology-mediated computer and mobile-assisted language learning (C/MALL) in online classes; however, this adaptability posits some challenges, which need technical support, training, interactions on its usage for language acquisition. The argument emphasizes the discourses between FLA teachers, parents, and institutions for creating a conducive environment and technological affordances for executing computer and mobile-assisted language learning in significant ways. Besides, it highlights the contradiction between the usage of Smart Mobile Devices (SMDs) for language acquisition and lack of efficiency and effective use of such devices by teachers, and the formalities of mobile use for teachers to include student-centered activities and students' immersion. Finally, the study presents implications and prospects for future studies based on the perception of FLA teachers, and parents towards the use of the computer or SMDS viewed as CALL or MALL.

Index Terms—mobile-assisted language learning, language acquisition, language learning, teacher perception, CALL

I. INTRODUCTION

Before March 2020, the concept of virtual and online learning was known to very few people. The sudden arrival of unprecedented and unforeseen pandemics has brought pernicious impacts on human lives and academia remains no longer an exception. Online learning, perhaps, gained momentum in the last decade of the last century, but today, it has become the main source of learning. There have been revolutionary changes in academia that recognized the vitality of technology-mediated learning in its contexts and purviews. This century witnessed a massive usage of mobile technologies by people making them aware of abrupt changes in global scenarios. Numerous advantages like handiness, smooth functioning, customization, and connectivity, make mobile phone users easy to adopt from different perspectives; alike, students and teachers today use it in learning and teaching. This provided a silver line in the dark clouds for stakeholders who took it first as a challenge and then transformed it into opportunities that included students' expertise in substantial mobile usage in daily life. Thus, the millennials are given ample opportunities to exploit their technological skills and this provided the required impetus to online learning. A little action required is to change the direction of students' inclination from games to language learning, and also underscore the prospects and affordances of mobile phone usage to guide them how Smart Mobile Devices (henceforth, as SMDs) may facilitate language learning by adequate access to resources to gain knowledge, acquaintance of language that can be translated through better communication and contribution to the native culture and global business world. Similarly, parents, teachers, students, and stakeholders who never had experienced such measures and technology-mediated and computer or mobile-assisted language learning (henceforth, C/MALL) affordabilities have now become familiar to utilize it effectively in online learning. These, for now, replace as an effective tool for offline classrooms. The attitude, method, panache, and approach to learning might differ to different subjects, but the fundamental requisites remain the same for all subjects. Alike, foreign language acquisition (FLA) has its own unique features to language learning since it facilitates different tools, techniques, and resources to solidify learning situations and opportunities for language learners. Therefore, the study tries to comprehend different perceptions around the orientation of the stakeholders and technical affordances. It also makes a seminal attempt to underscore issues of teachers' perspectives, their understanding, awareness, utilization, and effectiveness of technological mediated mobile capabilities.

Though several studies on C/MALL deliberated on teacher efficacy, student efficiency, knowledge, skills to operate mobile applications, and affordances, there is still ample scope of studies examining and focusing on the perception of FLA on the use of the technology-mediated C/MALL. These perspectives assist students to integrate their know-how into online classes; on the other hand, teachers may create such ambiance that invites, engages, and makes language learning complete. For this to happen, the researchers prepared a questionnaire that dealt with all the burning issues

teachers meet in language learning. Its main aim is to collect required information, via online personal interaction and online questionnaire, on how the prevailing learning concepts utilizing technology-mediated sources like C/MALL contribute to FLA and the findings, thereafter, assist researchers to understand how effective these devices and methods are in enhancing learners' language proficiency. Additionally, it will also guide FLA teachers to think more to make the best utilization of SMDs in offline classes, and also to introduce technology in the curriculum to influence the primitive notion of traditional practices in language acquisition and language learning.

In the light of the abovementioned introduction, the two given terms 'CALL' and 'MALL' need further explanation to make concepts clear for the worthy readers to better comprehend the forthcoming proceedings.

A. Computer-assisted Language Learning (CALL)

Today, we witness students attending online classes replacing the classical education methods. Modern technologies have created a plethora of opportunities to create computer software programs, journals, and lessons that include exercises on reading comprehension, vocabulary building, writing, grammar, listening, and speaking for attaining fluency and correct pronunciation for language acquisition and language learning. Students take more interest in the easy access to data, multimedia-based improved audio-visual study materials and data transmission technologies, and try to explore and learn more for better interpretation of language concepts. Levy (1997) has defined CALL as they search for and study of applications of the computer in language teaching and learning. Egbert (2004) defines it as learning a language through computers or with the aid of computers beyond the matter and the context. Simply defining Computer Assisted Language Learning (CALL) as an innovative instrument and method to assist language learners to develop their language skills, which enhance their communication skills, cognitive skills, and develop creativity, autonomy, efficiency, and collaboration.

Since the start of its journey in the 1960s, CALL picked momentum in the last lap of twentieth century with the invention of new storage devices CD-ROMs, CD, MP3, DVD, e-books, journals blog, website, and e-library that cater to all students' demands. These devices can store dictionaries, encyclopedia information, language course content in the latest video forms using graphics, animations, and other multimedia tools to make learning interesting and affordable. Lee (2000) believed that CALL focuses on individual needs; further, Ravichandran (2000) revealed that it allows learners to work on their own learning material to meet their learning objectives. Kung (2002) affirmed that language teachers using CALL have increased strikingly due to a range of language experiences. Therefore, CALL facilitates students with adequate contents to study their course and develop their language skills at their own interests, needs, time, pace, and learning styles. We may summarize CALL with Bahrani's definition that states:

> The computer-delivered combination of a large range of communication elements- text, sound, graphics, pictures, photographs, animation, and moving video. Language Learning is concerned with the development of communication skills and has traditionally and creatively exploited all these communication elements in its classroom context. (Bahrani, 2011, p.273)

B. Mobile-assisted Language Learning (MALL)

The technological advancements have brought tremendous changes not only in the information and communications technology sector but also enabled learners to use SMDs in their day-to-day learning. Every child uses a mobile phone at early childhood and eventually it becomes a significant part of life. The SMDs include mobile phones, tabs with an internet capability, language software, electronic encyclopedia, dictionaries, MP3 players, etc. The salient features of portability, flexibility and ease to operate different applications make it user-friendly and effective. Similarly, learning through SMDs, in language acquisition and language learning perspective, is a modern technique that facilitates learners to perform their learning activities and access the course learning materials easily and freely without any constraints at their own convenience of place, time, and resolve using the SMDs. Holbah and Sharma (2021) revealed that teachers used technology to conduct activities that allowed students to participate and enhance their cognitive skills. Many studies found learners achieve better results when they utilize their knowledge, skill, intent to enjoy, self-efficacy, and easy handling characteristics in language acquisition.

Twarog and Pereszlenyi-Pinter (1988) carried out research on MALL that indicated the 1980s but with the telephone-assisted language because telephones were the only means to provide distant language learners with assistance and feedback. MALL came to academia in this century and has grown immensely in the last decade in the language learning domain. Kloper et al. (2002) on reflecting MALL argued five unique educational attributes of SMDs; portability; social interactivity; context-sensitivity; connectivity; and individual learning.

Kukulska Hulme and Shield (2008) explained MALL as formal or informal learning mediated via handheld devices that are potentially available for use anytime, anywhere. Several studies have been undertaken in the century that focused on the MALL applications, multimedia usages, and developments on incorporating features to develop communication skills (e.g. Stanford Learning Lab; Chinnery, 2006; Kukulska-Hulme & Shield, 2008; Thornton & Houser, 2003; Garcia Cabrera, 2002; Belanger, 2005; Kukulska-Hulme, 2005). Therefore, we may call it a younger sister of CALL but has a bright future to dominate the world of academia with its cutting edge features.

Before we continue the research process further, it is equally important to understand the related studies previously carried out utilizing the technology-mediated instruction using CALL or MALL and how far they contributed to this language acquisition and language learning. Besides, it will facilitate easy sail to take up the research questions

effectively to arrive at certain conclusions to serve as a panacea to most language acquisition problems, and propositions for future reference; therefore, the brief explanation of the previous connected studies follows.

II. PREVIOUS STUDIES

To build a robust platform for the research, it is a prerequisite to understand the development of CALL and MALL (discussed above) and to know the perspectives of FLA teachers on the implementation in online learning. The current situations in online learning created abundant opportunities to investigate the pros and cons of CALL or MALL on students' learning. Numerous studies illuminated teachers' perceptions on its effective usage, self-efficacy, pedagogical affordances and challenges of these devices (Churchill et al., 2012; Handal et al., 2013; Marinakou & Giousmpasoglou, 2014; Mills et al., 2014; Pegrum et al., 2013; Sad & Goktas, 2013; Thomas & O'Bannon, 2013; Woodill, 2013). Teachers' perceptions on integrating SMDs to enhance teaching are paramount to the success of implementing mobile technological innovation in education (Handal et al., 2013; Marinakou & Giousmpasoglou, 2014). More exposure to the foreign or second language through mobile phone also enhance interest and develop reading, writing, and listening skills, as Sharma (2018) claims that the students are usually exposed to language through; watching TV, videos, movies, listening to music, read books, classroom instructions, interaction, and mobile-phone applications.

Since SMDs has a significant part in students' routines, it may be for reading and sending messages, sharing photos, writing opinions on specific issues, listening to music, watching videos using social media platforms. On the other hand, students and teachers communicate through emails, writing blogs, attending videoconferences, planning and sharing routine activities, searching information and content for subjects, and many more creating a healthy digital learning environment. The two concepts CALL and MALL contribute to developing language proficiency in reading comprehension, listening audios, grammar, writing, quizzes, worksheets, assignments, pronunciations, speaking, etc. The former emphasizes using computer technology for language learning and its related features, the latter trails CALL by using mobile technologies and related concepts applying it to language learning. Therefore, students use both CALL and MALL extensively not only to build cognitive ability to improve language proficiency but also to build strong bonding with teachers, relatives, and friends. Additionally, sustaining the power of SMDS may be used to affect learning both in the social-cultural and cognitive aspects (Pachler, 2009) whereas it also stimulates interaction among students outside the classroom (Sharples et al., 2009). Both are complementary and supplementary each; however, MALL differs from CALL in its use of personal, portable devices that enable new ways of learning, emphasizing continuity or spontaneity of access across different contexts of use" (Kukulska-Hulme & Shields, 2008, p. 273). Both play a major role in gauging learners' achievements accurately validating their results. Ebadi and Bashir (2021) revealed that mobile-based dynamic assessment enhances EFL learners' written proficiency as a result of the collaborations between the learners and the instructor using text and voice-based mediation. These findings state the efficacy of using mobile technology as a tool and technique in language teaching and learning beyond traditional classrooms to relaxed learning environments. The use of ICT has been extensively used in the current scenarios; alike, CALL and MALL have gone ahead among students and researchers and proved their worth with its salient features mainly individualized learning.

The aforesaid studies have underscored the usages in language acquisition and language learning in different perspectives; however, ignoring the major stakeholder teachers' view on the effectiveness of CALL and MALL for their students. Similarly, a few studies established evidence proving its positive effects on learners' motivation (Kim et al., 2013), and on the degree of collaboration and interaction both among learners and between the teachers and learners (Goh et al., 2012).

III. RESEARCH QUESTIONS

The following questions guided this study:
1. What are the teachers' perspectives towards CALL/MALL usage in language acquisition and language learning?
2 Does the CALL/MALL significantly improve students' language acquisition and language learning?

IV. RESEARCH METHODOLOGY

The case study was preferred as the qualitative scientific inquiry approach to investigate the effectiveness of CALL and MALL when implemented in the pandemic to further understand parents' and teachers' perceptions of English as a foreign language learning. It followed the triangular method for data collection through personal interactions, online questionnaire, and participant observations. The questionnaire was prepared in Arabic to get more insights and feedbacks. Adequate deliberations were undertaken to design a questionnaire and later modified on the experts' opinions to ensure the reliability of the data obtained.

A. Participants

A group of seven (four males and three females) working at the English Language Institute in Jazan University was randomly selected for conducting personal interactions after obtaining their permission to participate. The participating faculty members were originally from Sudan, Egypt, Yamen, and Saudi Arabia. Four of them were doctoral and three

obtained their master's degrees, all working in different colleges. All seven participants spoke both English and Arabic (as their native language) fluently.

TABLE 1
SUMMARIZES DEMOGRAPHIC INFORMATION FOR THE PARTICIPANTS

	Parents' age	Teaching Experience in KSA in KSA	Highest level of education	Language use at home
PR/TR-1	35-40	More than 10	Ph.D	Arabic
PR/TR-2	40-50	More than 10	Ph.D	Arabic
PR/TR-3	50-60	More than 10	Ph.D	Arabic
PR/TR-4	40-50	More than 10	Ph.D	Arabic
PR/TR-5	30-35	Less than 10	Master	Arabic
PR/TR-6	35-40	Less than 10	Master	Arabic
PR/TR-7	30-35	Less than 10	Master	Arabic

B. Data Collection

Informal-interaction

To get reliable and real inputs, the researcher conducted informal interviews telephonically to allow respondents to express their opinion more freely. This was required to get better respondents' understanding of a topic, situation, setting, etc. It sets a platform to administer questionnaires to get their genuine opinions responding to the given questions. During the personal interaction, ten semi-structured questions were asked to engage and respond in narrating their education, teaching experience, professional careers, personal interests, learning environments, educational expectations for students, experience using C/MALL in online teaching and learning, opinions about use of mobile technology and suggestions. The participants answered all questions.

V. TEACHERS' PERSPECTIVES

A. Role of the Professor in Motivating or Encouraging Students to Use Technology in Education

The teachers in this study demonstrated their commitment to motivation and encouragement to use mobile technology in their students' language learning and claimed that the learners will be able to learn faster, perform and develop their linguistic skills. All were unanimous on incorporating CALL and MALL in language acquisition and language learning because of distinct features mobile technology has. The students reflect better learning since they can easily access the sources on mobile to extract information by using MALL as per their convenience of time, place, and affordances. The teachers believed that these experiences were by and large fruitful for students to develop good communication skills. Some of the responses to the question are given below.

> Use of CALL and MALL guide students on how to use technology tools to learn English (attend lessons, do homework and class fees, participate and interact during lectures) [TR1]
> The role of the professor lies in motivating the student to use technology by providing examples of how to use these techniques in building vocabulary, grammatical exercises, and different language skills, and how the student can use various means to develop self-learning skills, and may also encourage him through continuous reminders and some assignments that require the use of student of that technique. [TR3]
> Undoubtedly, the professor plays a pivotal role in motivating his students to use technology in education by setting a set of tasks and assignments and assigning them to search for answers and additional information using the technologies available to them. [TR4]
> The role of the professor in motivating students to use technology in education lies in: the use of modern and flexible programs that can be applied with students so that it is easy for the student to use them as well, such as Blackboard, Zoom, Oxford Dictionary, Canvas, the electronic version of the curriculum and others; assigning students to perform some tasks and duties and submitting them electronically through some electronic applications such as Blackboard and others; and diversification and renewal in the use of effective electronic means such as the whiteboard, illustrator, images, audio and video clips, presentation files such as PowerPoint, Prezi, and share them with students during the lecture instead of being limited to the electronic book only.
> [TR7]

B. Assistance the Professor Provides for Students to Use English using Mobile Technology

Students learn better and faster when they get support from their teacher to use the English language using computer-mediated mobile technology. The teachers illustrated that providing ample support in content, feedback, allowing them to use social media, providing them additional language learning applications, etc. help them improve their linguistic and cognitive skills to overcome their difficulties. For example

> Determine the level of students' educational attainment through exercises and direct and indirect questions during lectures; also provide individual and group instructions and directions to students to help them overcome their difficulties. [TR1]

The professor can provide direct assistance to the student by introducing him to the various technical means and their types and advantages available to the student, and there is no harm in presenting a comparison or comparison with the student to be aware of the advantages (and defects, if any), and he can help him on how to use them in his scientific, linguistic and cognitive achievement through direct practical application.   [TR3]

By motivating students to read various topics from websites, and encouraging them to practice and solve additional exercises or standardized tests such as IELTS and TOEFL, as well as by helping them to join English language courses provided by trusted bodies such as the British Council and Cambridge centers.
[TR4]

By providing websites and applications that help the student learn English. Also activating the technical use in virtual classes by sharing links to sites such as (white board to teach writing or some games such as Kahoot).
[TR5]

C. Home Environment Motivates and Encourages the Student to Study the Language

The home environment plays a vital role in students' life since it creates conducive learning conditions to partake and develop their reading and writing skills. All participants responded positively and agreed that the homely learning environment language enhances students' abilities to adapt, think and learn for future success, and providing positive experiences facilitates social interaction, attention and activities to stimulate progressive attitudes to learn, reducing distractions and enhancing affective skills. Besides, it also motivates and encourages students to develop socio-cultural communication and build good relations with their peers, family, and community. For example

Yes, when the appropriate tools and resources are available for learning and the appropriate family environment for study, as well as a continuous follow-up from the parents.   [TR1]

The home environment can motivate the student if they see that their son is motivated to learn, and it is preferable that the student declare this to his family so that he receives moral and material support and encouragement. The family can also cultivate the spirit of perseverance and competition in their son through supervision and follow-up to create the desired home environment.   [TR3]

Yes, by creating a quiet environment suitable for education. During the e-learning period during the pandemic, I encountered a large number of students who could not open the microphone and participate in speaking activities due to the inconvenience around them. It did not create a suitable environment for them to learn.
[TR5]

D. Student Encourages the Teacher to Use Technology and Teach the Scientific Subject (The Course)

Academia demands a teacher's transformation from a classical to a student-centered approach to teaching and learning because teachers are their role models and contribute immensely to student learning. They not only deliver academic knowledge but also impart ideal socioemotional, cognitive, and affective skills to develop students' life skills. Therefore, it's important for millennials to encourage their teachers to adapt to innovative technological skills in teaching and developing linguistic skills. Teachers opined that

Yes, the distinguished student always yearns for everything that is new and useful, especially in the field of technology, unlike the average and weak student - individual differences.   [TR2]

Yes, the student encourages me as a professor to use technology in order to be familiar with the different teaching methods and so that I can follow the learning methods of my students and share their experiences with each other through me as a professor. Sometimes I find it an opportunity to present some educational material through that channel that my students have involved me in to confirm the correctness of their learning methods.   [TR3]

Yes, and strongly, the current generation is enabled and enjoys technology. When technology is used, student interaction increases. I make sure to use it in accordance with the objectives of the article.   [TR5]

Yes, the female students' love for technology as the vast majority, the speed of their interaction, the presence of various means that help the students and the professor alike and break the deadly routine in the traditional classrooms, as in the traditional classrooms the teacher is the source of information, while the virtual classrooms have diverse sources of information and the professor is just a facilitator and assistant to deliver the information.   [TR6]

E. Things that Motivate or Encourage Teachers to Use Technology and the Educational Institution's Role to Motivate Teachers

Several factors motivate teachers to use technology that includes their interaction and experience using ICT, vast usages of SMDs; new technology and its benefits, and demand to accomplish teaching objectives. Institutions do facilitate teachers by conducting goals-focused training, communicating and collaborating on new projects that need support, and coordinated efforts to develop productive content to meet students' and market demands. A few more factors described by respondents are

Student attendance and interaction with the teacher and the educational material, availability of appropriate technical equipment, and continuous training of faculty members on the latest teaching methods.   [TR1]

One of the things that motivate me to use technology is the student's psychological readiness to do some extracurricular duties, but in the same context and course objectives, and what encourages me is my ability as a professor to be able to transfer my skills and explain them to the student easily. The educational institution encourages me by introducing the different programs and offering courses in this regard, but there is no guide or glossary for the different technologies, as far as I know. [TR3]

I mentioned earlier, the different levels of the students and their individual differences encourage me to diversify in the use of modern electronic means. The English language instructor at Jazan University encourages faculty members to use technology in lectures, short tests through the Blackboard, speaking skill tests through the Zoom program, and reinforcement lessons for students who are struggling in the English language. [TR7]

VI. IMPLICATIONS

The current study illustrated that the teachers have encouraged and motivated students to support the usage of CALL and MALL in English language learning. The teachers opined that CALL/MALL usage in language acquisition and language learning produced significant results proving its worth on learners' linguistic skills. Additionally, the interactions and deliberations cemented relations between teacher and students, and among learners creating conducive learning environment. However, findings revealed different levels in the teacher's usage to technology-mediated language learning using SMDs, students' readiness, lack of proper instructions, and non-availability of glossary or guide on technology. The findings indicated unanimity for adopting technology in language learning and ensuring proper delivery of digital resources. adaptability posits some challenges, which needs technical support, training, interactions on its usage for language acquisition. The aforesaid arguments emphasize the discourses between FLA teachers, parents, and institutions for creating conducive learning environment and technological affordances for executing computer and mobile assisted language learning in significant ways. Sharma (2022) stated that the students made the best use of technology and used social media applications and language apps in smartphones to participate in group reading activities and solve problems. Besides, it highlights the contradiction between the usage of SMDs for language acquisition and lack of efficiency and effective use of such devices by teachers, and the formalities of mobile use for teachers to include students-centered activities and students' immersion. Nevertheless, some variations were reflected in socio-economic conditions, educational and professional experiences; therefore, a more in-depth probe of reasons not discussed in the study might be investigated in future studies with larger sample sizes. Future studies might also focus on creating technology-mediate-cum-intervention curriculum designs that may contribute to English as foreign language acquisition and language learning using smart SMDs. Besides, the current study stretches its prospect of transforming from a classical-to-modern and teacher-to—student centered learning approach using SMDs to promote and scrutinize the pros and cons that may be ineffective and dormant in other learning environments. The relationship between parents' perceptions of CALL/MALL practices, teachers' practices, and their students' commitment to these teaching practices may be explored further. Many related studies may be thought upon widening the scope of CALL and MALL usage and Social Media Platforms in other disciplines to meet students' challenges to accomplish academic objectives and their smooth transition to new professional culture.

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REFERENCES

[1] Bahrani, T. (2011). Computer Assisted Language Learning – Some Aspects. *Language in India, 11*(9), 271-278.
[2] Churchill, D., Fox, B., & King, M. (2012). Study of affordances of ipads and teachers' private theories. *International Journal of Information and Education Technology, 2*(3), 251-254.
[3] Ebadi, S., Bashir, S. (2021). An exploration into EFL learners' writing skills via mobile-based dynamic assessment. *Education and Information Technology, 26*, 1995–2016. https://doi.org/10.1007/s10639-020-10348-4
[4] Egbert, J. (2004). Mediating the digital divide in CALL classrooms: Promoting effective language. *ReCALL, 16*(2), 280-291.
[5] Goh, T. T., Seet, B. C., & Chen, N.S. (2012). The impact of persuasive SMS on students' self-regulated learning. *British Journal of Education Technology, 43*(4), 624–640. doi:10.1111/j.1467-8535.2011.01236.x
[6] Handal, B., MacNish, J., & Petocz, P. (2013). Academics adopting SMDS: The zone of Haythornthwaite (Eds.). *The Sage handbook of e-learning research* (pp. 221-247). London: Sage.
[7] Holbah, W. A., & Sharma, V. (2021). Listening to Saudi EFL Learners' Voices: Demotivating Factors Affecting Learning. *Theory and Practice in Language Studies, 11*(12), pp. 1717-1723. https://doi.org/10.17507/tpls.1112.26
[8] Kim, D., Rueckert, D., Kim, D. J., & Seo, D. (2013). Students' perceptions and experiences of mobile learning. *Language Learning & Technology, 17*(3), 52–73. Retrieved on 22 December 2021 from http://llt.msu.edu/issues/october2013/kimetal.pdf
[9] Kloper, E., Squire, K. & Jenkins, H. (2002). Environmental Detectives: PDAs as a Window into A Virtual Simulated World. *In Proceedings for IEEE International Workshop on Wireless and Mobile Technologies in Education*, 95-98.

[10] Lee, K.W. (2000). English teachers' barriers to the use of computer assisted language Learning. *The Internet TESL Journal, 4*(12). Retrieved December 28, 2021 from http://iteslj.org/Articles/Lee-CALLbarriers.html

[11] Levy, M. (1997). *CALL: context and conceptualization*. Oxford: Oxford University Press.

[12] Marinakou, E. & Giousmpasoglou, C. (2014, March). M-learning in higher education in Bahrain: The educators' view. *Proceedings of the, HBMeU Congress 2014: Leading transformation to sustainable excellence*. Dubai, UAE.

[13] Mills, L., Knezek, G., & Khaddage, F. (2014) Information seeking, information sharing, and going mobile: Three bridges to informal learning. *Computers in Human Behavior, 32*(2) 324-334.

[14] Pachler, N. (2009). Research Methods in Mobile and Informal Learning: Some Issues. In: Vavoula, G., Pachler, N., Kukulska-Hulme, A. (eds.) *Researching Mobile Learning: Frameworks, Tools and Research Designs*. Peter Lang, Bern, Switzerland, 1–15.

[15] Pegrum, M., Oakley, G., & Faulkner, R. (2013). Schools going mobile: A study of the adoption of mobile handheld technologies in Western Australian independent schools. *Australasian Journal of Educational Technology, 29*(1), 66-81.

[16] Ravichandran, T. (2000). Computer assisted language learning (CALL). *In the perspective of interactive approach: advantages and apprehensions.* Paper presented and published in the Proceedings: National Seminar on CALL, Anna University, Chennai, pp. 82-89.

[17] Sad, S.N. & Goktas, O. (2013). Preservice teachers' perceptions about using mobile phones and laptops in education as mobile learning tools. *British Journal of Educational Technology, 45*(4) 606-618.
      Sharma, V. (2017). Saudi Students' Perspective on Social Media Usage to Promote EFL Learning. *International Journal of Linguistics, Literature and Translation, 2*(1), 129-139. https://doi.org/10.32996/ijllt.2019.2.1.17

[18] Sharma, V. (2022). Letting the Struggling Saudi EFL Readers Take Lead: How Teachers Transform English Language Instruction. *Journal of Language Teaching and Research, Vol. 13*(3). Accepted for publication.

[19] Sharples, M., Arnedillo-Sánchez, I., Milrad, M., & Vavoula, G. (2009). Mobile learning. In N. Balacheff, S. Ludvigsen, T. Jong, A. Lazonder, S. Barnes (Eds.) *Technology-enhanced learning*, 233-249. Netherlands: Springer Netherlands. doi: 10.1007/978-1-4020-9827-7_14.

[20] Steinfeld, N. (2021). Parental mediation of adolescent Internet use: Combining strategies to promote awareness, autonomy and self-regulation in preparing youth for life on the web. *Education and Information Technology, 26*, 1897–1920. https://doi.org/10.1007/s10639-020-10342-w

[21] Thomas, K. & O'Bannon, B. (2013). Cell phones in the classroom: Preservice teachers' perceptions. *Journal of Digital Learning in Teacher Education, 30*(1), 11-20.

[22] Woodill, G. (2013). The unique affordances of mobile learning understand how to leverage them prior to design and development. Retrieved on 22 December 2021 from http://floatlearning. com/ 2013/11/the-unique-affordances-of-mobile-learning/

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Effectiveness of Existing Language Courses and Classroom Tactics for ELT at the Engineering Universities in Bangladesh

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Abstract—**This study aimed at investigating the English language teaching (ELT) at eight engineering universities in Bangladesh with a particular focus on the existing language courses and classroom teaching techniques used in English language education of those selected universities. During the study, students' perceptions and their academic, social, and emotional standpoint regarding English language teaching were also considered. The study sample encompassed 144 present and former students of those selected universities. A mixed-method approach, both qualitative and quantitative, was administered to collect data on the present English language courses and the classroom teaching techniques. Under the qualitative approach, the study's findings revealed that the classroom teaching techniques and instructional methods of the selected engineering universities require modification based on the identified needs and expectations of the teachers, students, and the responsible persons of the workplace.**

Index Terms—**ELT, classroom teaching techniques, engineering students, professional development**

I. Introduction

Engineering is the most significant arena of education in the world. But English is an instrument that affects engineering students in their life. Engineering students face lectures, labs, tutorials, papers, and project reports in English in academic life. Not only that, they need to deal with the internet now and then, and the internet delivers the information in English. At the office, English is the operative language of an extensive range. So, English communication capability plays a significant role in engineering students' academic careers, for competitive examinations, for securing a scholarship or executing their duties. Still, very often, many engineering students do not possess sufficient capability in using communicative English. Clement and Murugavel (2015) claimed that many engineering graduates remain unemployed due to poor communication skills. However, this study dealt with ELT at engineering universities in Bangladesh, focusing on English language courses and classroom teaching techniques.

Sultana et al. (2019) researched the effectiveness of English courses for diploma engineers admitted into the undergraduate level at engineering universities in Bangladesh through the depth evaluation of the whole procedure. They focused that evaluation should consider a significant number of issues, including efficacy of the English language course, materials used in a teaching-learning way, learning environment, assessment and feedback procedure.

The medium of instruction (EMI) in engineering universities is primarily English. Khan et al. (2020) mentioned that even after twelve years of academic study, students are weak in using the English language. However, in the case of engineering students, specific English courses need to be completed irrespective of their discipline or background knowledge. Gradually, English has continued to be an essential part of the communication matrix. Communicative Language Teaching (CLT) was a necessary shift for ELT in Bangladesh. At the tertiary level, engineering universities have adopted different methods and approaches to develop the English proficiency of future engineers to prepare them for the career struggle in terms of communication skills. This study concentrated on the English language courses and the classroom teaching techniques of engineering universities to address the loopholes with suggestive measures for their effectiveness.

The two dominating factors of the current world are globalisation and information technology which demand sound knowledge of English. Knowledge of English is a prerequisite for computer literacy again, and globalisation will face hindrances without successful communication, which requires proficiency in the English language. Thus, the need for proficiency in English is multi-folded as it has a considerable impact on academic, social, and professional fields. Students of engineering universities often displayed unsatisfactory English language performance despite their twelve years of compulsory education in English. A majority of them could neither cope with the academic requirements nor with the challenges of the professional domain. However, the objectives of this paper were (i) to identify the ways of improving English language teaching from learner perspectives at the engineering universities in Bangladesh; (ii) to

identify the problems of engineering students' language education in Bangladesh; and (iii) to explore the efficacy of classroom techniques used in English language classrooms at engineering universities in Bangladesh.

II. THEORETICAL ASPECTS

The English language has become prevalent for the commerce, cultural and business sectors and particularly for internet infrastructures around the globe as it is extensively used by information and technology industries. English language skill is the foremost of getting a decent job in those countries as their mother tongue is English. So, there is a high demand for people in foreign countries who can speak better English. Bhuiyan (2021) mentioned that English for specific purposes (ESP) could focus the learners' attention on the language and communication requirements in a particular professional field. Generally, engineering students need English language proficiency (ELP) to understand, coordinate and accomplish their projects, reports, graphs, and lectures and communicate with various people from different parts of the world. The students need ELP for academic purposes, future jobs, and to communicate with the outer world (Ibrahim, 2016). Therefore, quality assessments and evaluations need to be enacted to reaffirm engineering education's advancement and cater to their needs (Olds et al., 2005). A need-based and effective English language and training course enhance engineering students' communication skills (Riemer, 2002). The theoretical basis is found in the ideas of Hutchinson and Waters (1987) as they mentioned that ESP focuses on the awareness of the need, rather than the existence of a need. So, it is clear that learning the English language should be need-based and specific.

When a person is skilled in English, it increases employability, such as facilitating international mobility like tourism, migration, and studying abroad. Higher levels of English proficiency graduates in Bangladesh generally find jobs quicker in reputed intuitions than others. Students interested in going abroad for higher study or work purposes need to know the international language better (Shaheen et al., 2013).

Pardayevna et al. (2021) study emphasised the core concept of ESP that includes the approach and the designing of the syllabus, course design, materials selection, evaluation systems, etc. Mahmood (2014) postulated that technology-based and innovative methods could facilitate the teaching-learning process a lot. It is a tremendous challenge for the instructors to make the classroom activities attractive & enjoyable. This paper also focuses on selecting various authentic tasks to make the classroom activities live and attractive to improve the English communication skill of the learners. The report recommends some effective procedures for enhancing communication skills and promoting students' creative, critical and analytical thinking in ELT programs in a unique way.

III. REVIEW OF RELATED STUDIES

English communication skill has become a vital prerequisite for an applicant to be employed in different national and international establishments. Engineers all around the world would like to use English for some features of their occupations. Considering this, the existing English courses need to be redesigned for professional ground.

Latha (2014) shows that many rudiments in the engineering field necessitate preparing theoretical information such as projecting or lab reports etc., that need a decent command over English in the respective area. Hence a good grasp of the English language is necessary. This study focuses on the importance of English in the job sector.

Gözüyeşil (2014) showed that engineering pupils mainly need to develop their skills for reading English texts. The students of engineering background consider the speaking skill as really imperative, but scopes are less available. Eshreteh and Siaj (2017) opined that English language learners should not be limited to curriculum-based study; rather cultural aspects and technological superiority would be an added platform for self-development though Sultana & Dovchin (2019) consider that the EFL students have some educational allegations for foreign language instruction out of the classroom as digital language applications. This study injected the feeling that learners should go out of the box with a positive perception note apart from their discipline.

Rahman et al. (2017) study's findings unfold several challenges faced in the instructional and learning processes, including the inappropriateness of the courses to reach the goal, time constraints, ineffective teaching techniques, etc. It is suggested that teachers' training should be provided regularly to make the whole English language teaching procedure more effective at engineering universities.

Tasić (2009) conducted a study in the department of mechanical engineering. The study's findings show that though the ESP approach is applied to teach English, modifications are required. Shamrao (2013) carried out a study that deals with different significant issues related to the English teaching-learning process of rural engineering students, including the importance of being skilled in English communication, challenges faced by the students, and overcoming the challenges. Several of the students in engineering colleges are from rural areas. The study's findings show that a significant number of rural engineering students cannot perform well in their professional life only because of their poor English communication skills.

Kainth and Kumar (2014) reveal that teaching English in India has not reached the expected standard, particularly at engineering institutions. That is a big reason for the unemployment of a significant number of technical graduates. As a neighbouring and developing country, Bangladesh is facing the same kind of problem. The current paper is an effort to find out the difficulties confronted by both the learners and the teachers in the educational process for English language teaching at the undergraduate level in the engineering and technological institutes.

Ngama et al. (2015) researched 20 entrepreneurs and 70 students from the engineering department as the participants in the interview method to overview their professional needs of English communication skills. The students took the Test of English for International Competency (TOEIC) to evaluate their general English ability. The study's findings show that the performance of both groups is low.

The above discussion clearly shows the importance of learning English for a better career, lifestyle, and education. It is undeniable that nothing can give you better opportunities in this tech-friendly digital era if you are fluent in English language skills. It is applicable for every citizen of the world as well as for Bangladeshi as well. Engineering students of our country can do their best in every sector of their life if they give the utmost attention to learn English properly.

IV. METHODOLOGY

The researchers used a mixed-method approach that integrated both qualitative and quantitative methods of data collection. The mixed-method approach enables the researchers to draw on all possibilities (Tashakkori & Teddlie, 1998) and provides a broader perspective to the study. The qualitative data helps to describe the aspects that quantitative data cannot address (Creswell & Creswell, 2017).

A. Sampling and Instrumentation

The populations of this study are the present and ex-students of engineering universities in Bangladesh. Eight engineering universities were randomly selected from different divisions of Bangladesh for the study.

The present students belong to level I/II/III of CE, CSE, EECE and ME departments. The ex-students were the students of the same departments with a minimum qualification of M.Sc. in engineering. The eight universities were chosen for the study from different country locations considering the different geographical settings. The purpose of selecting those universities from different parts of the country was not to compare the universities but to include respondents from diverse geographical backgrounds. Table 1 illustrates the demographic information of the participants. The sample has comprised a total of 144 participants from eight engineering universities. From each university, 15 present students (15X8=120), three ex-students (3X8=24) were randomly selected as the participants for the survey.

TABLE 1
DEMOGRAPHIC INFORMATION

SL	Participants	N	Gender (M / F)		Age	Discipline	Location
1	Present Students	120	65%	35%	18-22	CE, CSE, EECE, ME	Dhaka (02), Cumilla (01), Khulna (01), Gazipur (01), Rajshahi (01), Natore (01), Saidpur (01)
2	Former Students	24	67%	33%	26-32		

Krathwohl (2009) mentioned that a large amount of data could be collected quickly and economically from a large sample with the help of the questionnaire. Therefore, the primary tool for data collection was questionnaires in this study. The researchers administered six queries for each of the two domains, e.g., English language courses and classroom teaching techniques, to the existing students. Another set of questionnaires were directed to the ex-students with five queries for each domain. One open-ended question was asked to all to identify the significant problems in the related issues. The primary concepts for the questionnaires were adapted from Gözüyeşil (2014) and Sultana et al. (2019). However, the responses were received on a five-point Likert scale (1932), mainly in the format of Strongly Disagree (SD), Disagree (D), Neutral/No Opinion (N), Agree (A) and Strongly Agree (SA). The questionnaires entailed both open-ended and close-ended questions. The present and former students of selected engineering students were asked the questions keeping those three variables in mind.

B. Data Collection

The survey was carried out among the students of engineering universities in Bangladesh through questionnaires. Some of the questions were translated into Bengali for learners' easy comprehension and understanding. The students took about 50 minutes to answer all the questions. The data were collected from November 20l9 to February 2021. At the outset of the data collection, a consent form was given to the participants to make them aware of the purpose and nature of the research. It was ensured that the participants' involvement was completely voluntary. They were assured that the provided information would remain confidential and not be disclosed without their prior permission. The participants were also ensured that this study is for academic purposes and there is no risk of participating in the study.

C. Data Analysis

Berns (1990) opined that data analysis means to find "meanings from the data and process by which the investigator can interpret the data" (p.430). Similarly, as noted by Marshall and Rossman (1999), the goal of the data scrutiny is to bring sense, construction and order to the information. As the preliminary phase in examining the facts for this study, the researcher read all the information gathered from the completed questionnaires, interviews and other data sources. As the researcher has practical experience in the teaching-learning process at the engineering universities, he has perceived and interprets the data obtained in the questionnaire and other data sources. The data have been coded with the support of MS Excel and subsequently were analysed with the help software. Moreover, the literature review has provided guidelines for data analysis.

V. FINDINGS AND PRESENTATION OF DATA

A. *Present Students' Observation of English Courses Taught at the Universities*

In the first stage, the data were collected from the existing students. The first query was to know the perception about the English courses.
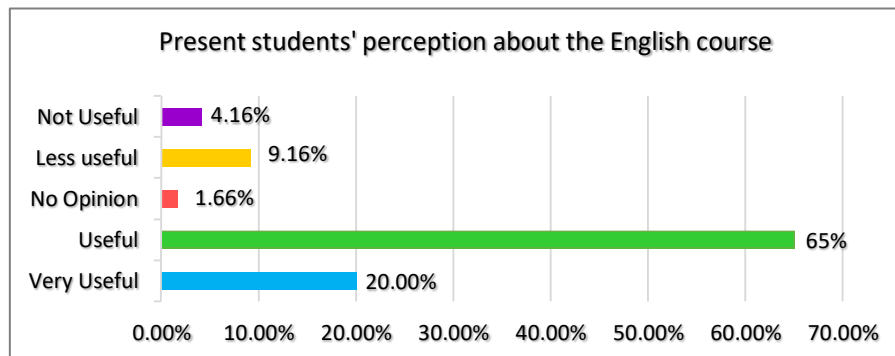

Figure 1. Learners' Perception About the English Course of Engineering Universities

20% of present students find English courses beneficial for them. 65% of the participants find the English courses as useful. Only a handful of 4.16% students have found the English courses not practical to make them competent in learning the English language to their needs. Therefore, the study implies that most of the engineering students are positive and intrinsically motivated to learn English (Mean 3.87).

Afterward, the participants responded to five more statements which indicates that the syllabus for the engineering students needs modifications.

TABLE 2
PRESENT STUDENTS' OPINION OF ENGLISH COURSES TAUGHT AT THE UNIVERSITIES

SL	Statements	Responses in percentages					Mean
		SD	D	N	A	SA	
1	English courses are perfectly focused on my future need of English.	8.33	48.33	2.50	37.50	3.33	2.80
2	The number of English courses offered at engineering universities is sufficient.	13.33	34.16	2.50	30.83	19.16	3.08
3	English courses to be conducted in the final year along with level one.	0	25.83	0.83	9.16	64	4.11
4	Learners' aims and expectations are fulfilled by the English courses offered at universities.	16.66	27.50	10.83	38.33	6.66	2.91
5	Which skill would you like to prioritise to learn in the English courses as per the needs of English proficiency?	Listening	Speaking	Reading	Writing	Other Opinions	
		10.83	57.5	3.33	28.33	0	

Statement-1 showed whether the existing courses focused on the participants' future needs or not. More than 48% disagreed that the course outline has less required content for the future career, whereas about 38% thought that the current courses possess career-related lessons. From this survey, it seemed that the English course outlines need to be redesigned based on the requirements of the workplaces. In *statement-2*, the present students were asked about the number of English courses offered by the universities during their engineering programs. About 34% expressed their dissatisfaction. However, 30.83% agreed and around 20% strongly agreed that the number of offered courses is sufficient. This also specified that the existing English courses need to be rearranged.

The students expressed their opinion (64%) in favor of English courses in the final year, while 25% thought that classes were conducted at the level I only (*Statement-3*). As the engineering students are from varied backgrounds, the students with good backgrounds may not feel the necessity of an additional English course in the final term. But, most of the students felt the necessity of the English courses in the final term, which indicated that more emphasis is required.

When asked about the expectations of the present students regarding the English course, around 38% agreed that they were benefited and more than 27% disagreed. Therefore, it is clear that there were some rooms to redesign the course, which might help the students to get maximum from it (Mean 2.91, *statement-4*).

In *statement-5*, the participants were asked to prioritise the English language skills, and more than half of the participants (57%) think speaking as the topmost prioritised skill as they needed it for communication. More than 28% of participants opined writing as the second important skill, whereas a meagre 10.83% considered listening and 3.33% reading as their required skills. Most present students thought speaking as the most important skill as they need to

communicate with friends, teachers and to establish an expected social value. However, as expected, 65% of students voted for speaking skill.

B. Present Students' Viewpoints of Classroom Teaching Techniques

TABLE 3
CLASSROOM TEACHING TECHNIQUES

SL	Statements	Responses in percentages					Mean
		SD	D	N	A	SA	
1	My English teachers let me understand the practical usage of English	25	25.83	9.16	23.33	16.66	2.81
2	I have learned English I would require in my future workplace from my university English teacher.	16.66	23.33	7.5	27.50	25	3.21
3	In my English classes, I have seen my university faculty applying new teaching techniques which I have not seen in my school and college classroom.	30	34.16	9.16	17.50	9.16	2.42
4	Numbers of trained teachers are available to conduct classes.	18.33	24.16	6.66	27.50	23.33	3.13
5	Teachers use diverse materials in classroom to bring interest among learners.	16.66	22.50	8.33	29.16	23.33	3.20

In the above table, *statement-1*, more than half of the students consider that their teachers do not let them understand the practical uses of English majority of the participants disagree that their English teachers let them understand the practical usage of English (Mean 2.81). However, 23.33% of the respondents agreed with the statement. In *statement-2*, the research finds that 27.50% of participants agreed and 25% strongly agreed, but also some participants disagreed (disagreed 23.33% and 16.66% strongly disagreed, respectively). So, it is clear that many students are not learning English satisfactorily, which may be required for their future workplace from their university English teachers (Mean 3.21).

In *statement-3*, another critical view has been depicted. 34.16% of the participants do not consider that their university teachers use innovative techniques for English teaching. So, they feel their learning process is very traditional (Mean 2.42). In *statement-4*, the research shows that around half of the participants feel trained teachers can conduct their classes (Mean 3.13). Again, 42.49% of the respondents were not at all agreed with this view. However, *statement-5* gives an idea that more than half of the participants feel that their teachers use diverse materials in the classroom to stimulate students' learning process, while several students disagree with it. So, it is clear that some engineering universities still do not have updated instructional practices (Mean 3.20).

In Figure 2, an essential aspect of students' point of view has been revealed. The majority of the learners (29.16%) preferred the blending of grammar-translation method (GTM) and communicative language teaching (CLT) for the teaching-learning process of the English language. However, 23.33% wanted GTM, and 24.16% voted for the CLT approach.
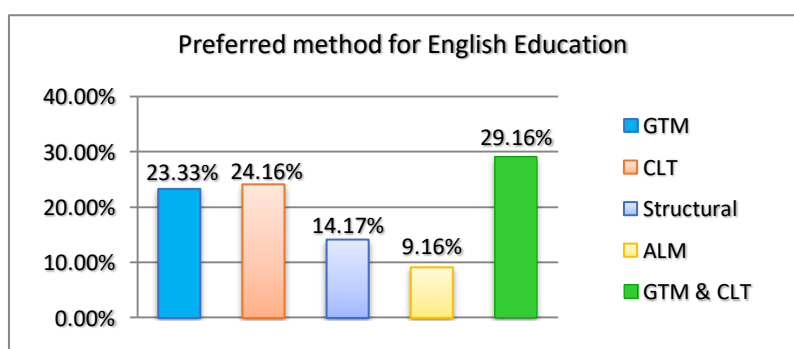

Figure 2. Learners' Perception About the English Course of Engineering Universities

C. English Courses Accomplished at the Universities: Former Students' Perspectives

In the second stage of the questionnaire survey, the researcher wanted to know the perception of the former students about the English courses they have experienced at engineering universities. From Figure 3, it is found that most of the former students considered their university English course as less valuable (54.16%) or not useful (20.83%). However, a few participants think those courses are helpful. Most of the students found the courses less useful (Mean 2.04).
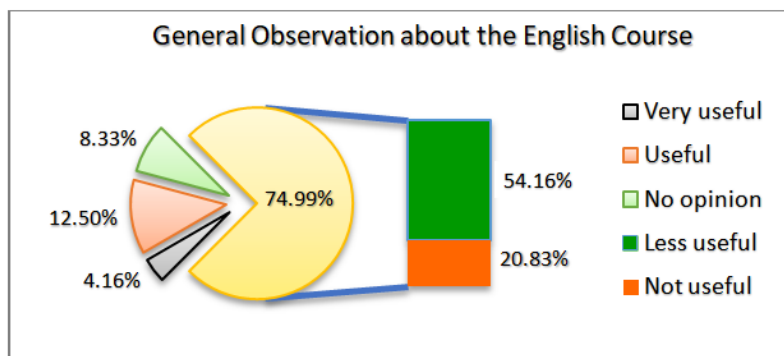
Figure 3. Former Students' Perceptions of the English Courses Taught at the Engineering Institutions

TABLE 4
PERCEPTIONS REGARDING ENGLISH COURSES TAUGHT AT THE ENGINEERING UNIVERSITIES

Sl.	Statements	Responses in percentages					Mean
		SD	D	N	A	SA	
1	The English courses are designed for career development.	8	17	4	63	8	3.06
2	The number of offered English courses is sufficient.	4.16	50	4.16	29.16	12.50	2.33
3	English courses need to be taught at level- IV along with level-I	83.33	8.33	0	8.33	0	1.33
4	The learnings from the English courses meet the expectations of the corporate officials.	8.33	33.33	4.16	37.50	16.66	2.37

In Table 4, item-1 shows that the majority of the participants disagreed (62.50%) and strongly disagreed (2%) that the university English courses are designed according to the career requirement and commensurate the professional necessity. In contrast, very few people agreed with the view. However, the responses to the statement prove that the English courses should be redesigned as per the learners' needs for career requirements. In item-2 in the above table, some ex-students also informed that the courses are sufficient (agreed 29.16% and strongly agreed 12.50%). But the majority of the participants (50%) did not agree with this. Such scenario again necessitates the probe into the facilities universities provide to their students. Item-3 in Table 3 strongly stated that the English courses must be taught at the final term. 83.33% of participants believed that English courses should be taught at level-IV, whereas 8.33% disagreed. Engineering students felt the necessity of this English course after joining the career field. Thus, the syllabus should also be planned as per the requirements of the learners. The responses for item-4 in the table-3 delineated a critical survey regarding the usage of English learning in the corporate world. 37.50% of participants claimed that the earned knowledge from the English courses didn't meet the need of the workplace. Of course, a considerable number of participants (33.33%) stated agreed. As the majority opined that the existing English courses did not meet the expectations, there might be some room to develop the contents of those courses.

D. Former Students' Opinions Regarding Classroom Teaching Practices

TABLE 5
REGARDING CLASSROOM TEACHING PRACTICES AT THE ENGINEERING UNIVERSITIES

Sl.	Statements	Responses in percentages					Mean
		SD	D	N	A	SA	
1	My English teacher let me understand the practical usage of English.	8.33	29.16	8.33	45.83	8.33	3.12
2	I have learned English I require in my workplace from my university English teacher.	16.66	20.83	20.83	29.16	12.5	2.99
3	Teachers use diverse materials in the classroom to prepare the learners suitable for the work field.	12.5	16.66	4.16	29.16	37.5	3.62
4	The teachers were adequately trained to conduct the language classes.	29.16	16.66	4.16	41.66	8.33	2.83
5	I received proper feedback whenever I needed.	12.5	20.83	8.33	37.5	20.83	3.33

In Table 4, *statement-1* is the representation of learners' perception of educational context. It is an excellent sign that more than half of the participants, 45.83% and 8.33%, understood the practical usage of English learning under the supervision of teachers. Contrastively, 29.16% and 8.33% of learners disagreed with the statement, which is also a considerable number. In *statement-2*, it has been noticed that half of the participants (20.83% and 16.66%) disagreed that they learnt required English from their university teachers for their workplaces while almost half (29.16% and 12.50%) disagreed. It is to be mentioned that 20.83% of participants refrained from an answer. This is alarming because a good number of students are not aware of their progress. This survey indicated that the English course needs to be redesigned. In *statement-3*, collected data claimed that more than 60% of the participants agreed that their teachers used

diverse and suitable materials in the classroom to prepare the learners for the work field. In *statement-4*, the former students expressed that the adequately trained teachers were not available satisfactorily (Mean 2.83). However, in *statement-5*, most of the students agreed that the English classes were exciting (Mean 3.33). So, it necessitates the teacher-training and modifications of classroom contents as the classes seems interesting to a good number of students. However, few students did not find the classes stimulating.

E. Major Problems Identified

The students were also asked about the frequent problems they recognise for ELT in the classrooms. The survey results helped the researchers identify and summarize twelve decisive barriers of three domains in English language education for engineering students in Bangladesh that may support the further investigation on the related fields. These are shown in Figure 4.

Figure 4. Problems in English Language Education at the Engineering Universities

VI. DISCUSSION AND IMPLICATIONS

Teaching is a ceaseless progression of learning. Successful English language teaching can improve engineering students' communication capability. Insufficient incentive and lack of opportunities sometimes become a clog for the ELT, but ensuring the required training and motivation may resolve this problem. Practical and purpose-based English language teaching can facilitate the students to get a good job and hold a better position at the workplace. Kim (2013) also emphasised the needs analysis to develop an English for Specific Purpose (ESP) course for engineering students. Generally, the essential ability in job placement would be major-related abilities, but English is regarded as one of the most critical abilities for job seekers' major requirements. As the engineering universities offer three to four English language courses during the undergraduate programme, students get less time to come across the language teachers. The students want their language classes to be more student-centered, task-based, less lecture-oriented, and process-oriented. So, the teachers can think about the ideas of Carter and Mcrae (1996) who mentioned that there should be some arrangement to provide supports to students. The study indicated that the classroom teaching techniques should fill with innovative ideas and hands-on activities. For that teacher training requires intensively. Different contextual pieces of training would equip teachers with skills and strategies such as engaging various activities for engaging students, creating communicating atmosphere, organising audio-visual aids, etc. (Karim & Mohamed, 2019). Thus, the learning becomes attractive to the students. Applying the latest digital technologies for language teaching will develop an interest in the young learners for the course.

The study found that many students like existing teaching practices though most of them claimed modifications. Shamrao (2013) recommends that both the teachers and students participate in many interactional activities that are very important to improve English communication skills. Tasić (2009) suggested several improvements should be made to make the procedure more effective, including motivating learners to give more focus on English language skills so that they can easily understand the English technical terms used in their field. Sultana et al. (2019) also suggested that the syllabus, materials and assessment system should be modified in accordance with the objectives of the course.

This study also indicates the need for modifications in the syllabus contents or teaching tactics (table-2, statement-4, Mean: 2.91). In another point, the present students (table-2, statement-1) former students (table-4, statement-1 and 4) both disagreed that the courses are not career or future needs-oriented. Latha (2014) and Kainth and Kumar (2015) also found similar opinions that though the courses are designed to make the learners skilled in some specific English

communication skills, they still fail to do so. In such regard, Gözüyeşil (2014) recommends altering the current curriculum in keeping with the requirements of pupils and the prospects of academics.

VII. RECOMMENDATIONS

The recommendations can be practical only when teachers and students can act together. However, some suggestions are appended below to address the English language teaching at engineering universities in Bangladesh:

A. Teachers' Training

University English teachers are often not willing to attend the training program as there are no rewards for attending the course. On the contrary, teachers' training is an essential part of elevating teachers' skills irrespective of the subjects they teach. Furthermore, it contributes to constructing teachers' perception and teacher individuality which governs teachers' accomplishments in the classroom. Any teacher training program aims to achieve teaching modification (Hargreaves & Fullan, 1992). Training for the teachers should be arranged regularly to make them acquainted with the up-to-date teaching strategy. Teachers' training programs should be compulsory for the teachers to update their teaching skills and promote the next rank at the organisations. The teacher training program should consider teachers' learning styles and motivation. The training program should be designed based on teachers' specific needs and expectations to help them teach effectively in the actual classroom.

B. Motivation

In the case of engineering students, teachers usually motivate the learners to know that these English courses have impact on their professional life. Moreover, there is not much fun, rather a great deal of stress in engineering education. Many students fail to turn up to classes because they fail to see the relevance of attendance and, at times, the relevance of the English topics being taught. Many engineering students are not incredibly motivated to learn the English language primarily because they have no real idea why they need English courses and whether all of the material is actually required for their career. So, besides teaching, the teachers need to motivate the learners and at the same time need to engage the students in a fun way to learn enthusiastically.

C. Evaluation and Testing Apparatus

Assessment and testing Apparatus should be another important aspect which the English teachers should follow intensively. Assessment of learners' language attainment is a significant part of teaching. Teachers should make questions according to the learners' acquisition. To engage the students creatively, there should be more open-ended questions where the learners can comprehend the text better with their imagination. A question that requires only 'information retrieval' and memorisation should be evaded. Besides, self-evaluation and peer evaluation should be sought along with teachers' evaluation. The selected engineering universities usually conduct written examinations to evaluate the students' language competency. These written evaluations hardly reflect the communicative competency of the students as a whole. Instead of these, students should be evaluated based on their day-to-day performance to be motivated to improve their communication skills rather than just their writing skills. Moreover, a good amount of score should be reserved for viva-voce, too.

D. Classroom Teaching Techniques

Students experienced a variety of classroom teaching techniques which often became a clog for the learners' perspective. The syllabuses for the engineering students contain the basic components of listening, speaking, reading and writing part, but the integration of these four skills is not planned rationally. The study has found that teachers with general English teaching experiences deal with the students at engineering universities who need ESP based approach in class. However, the following are recommended for resolving the English classroom teaching techniques:

E. Classroom Size

For effective classroom teaching, the strength of the students is fundamental, especially for language classes. It is recommended that an English language class contain 20 to 25 students' maximum so that the teacher can concentrate on each student and teach them and correct them individually. Engineering universities usually prefer the CLT approach for teaching English, where students demand continuous attention from their peers and teachers. A small class can facilitate this avenue and allow for a qualitative study, not a quantity one.

F. Infrastructure and Resource Bank

A resource bank can be established in each university where teachers and learners can store or issue required literature, text and other materials. Teachers should have the liberty to select texts for students and explore different paths of teaching. Our teachers should build up discrete teaching resources so that students can relate themselves to language teaching according to their understanding. Teachers can use the available resource books relevant to the engineering students' needs.

G. Workshop

Under the supervision of teachers, students can organise workshops on how to select texts for the engineering students and make different kinds of worksheets with intensive class activities for the engineering students during English sessions. This will develop leadership quality and will also instil interest in the course. At the same time, this will reduce the stage frights of the learners.

H. Multimedia

Engineering students are usually technologically sound. They depend on the internet and multimedia for entertainment-source. These sources can assist the students in improving their English language skills because the students do not feel like education. They can connect with the song's lyrics and movie characters and this assists them understand the language, expressions, comparisons, personifications, etc. The visual-only video teaching strategy (VOVTS) of Santos (2019) can be a tool for English language teaching effectively.

I. Newspaper, Magazines and Books

These are handy tools for developing English language proficiency in the classroom. Universities may plan for a compulsory reading hour of newspapers, magazines, books and novels for at least 30 minutes with 10 minutes discussion. Reading English newspapers and magazines daily helps a student to learn new words and enrich his vocabulary.

J. Class Activities for Students

Some class activities can be arranged for the students in an innovative way to learn with fun. Teaching through games can be an exciting way for engineering students as they remain under pressure of core subjects. Game of words can do an excellent job to increase the collection of vocabulary by teaching them the meaning of the words and practising them in everyday life. Games like hangman, scrabble, anagrams, word puzzles, etc., have been intended for this specific purpose of increasing vocabulary. Students can be interested in planning an extensive range of exercises, such as voting a quote, predictions, pyramid discussion, jigsaw, matching, gap filling, grids, charts, creative writing, cloze, rewriting, etc.

VIII. Conclusion

Presenting an individual's skills and professional capabilities does not depend on their knowledge of core subjects only, rather proficiency in the English language regarding communication skills matters a lot nowadays. Ensuring timely English courses and a suitable teaching environment at engineering universities to learn English in a modernised way can provide engineering students with easy access to the job market. Many Bangladeshi engineering students are displaying excellent performance in different countries of the world. Nowadays, seeking a good job or applying for higher education, proficiency in English has become a prerequisite factor for engineers. The lucrative jobs around the globe will be snatched away by competitors if the course contents fail to be commensurate with the professional requirements. Thus, this study has investigated the effectiveness of the English language courses and teaching techniques in English classrooms for developing English proficiency, teaching tactics, and the scopes of a better employment opportunity. The study faced several limitations also. The selection of the participants for the survey was a limitation. Had more students participated in the study, the research would have been richer in its findings and recommendations. Besides, interview of employees from the workplaces would be an essential source to get the actual need for linguistic competence, which was not considered because of the pandemic and time constraints. However, more research studies are required to know the students' motivational strategies, teachers' oral and written feedback, teacher-talk, teacher-research, teacher-training, professional development, and neuro-linguistic issues with greater concentration and participants' involvement.

References

[1]   Berns, M. (1990). *Contexts of competence: Social and cultural considerations in communicative language teaching*. New York: Plenum Press, DOI: 10.1007/978-1-4757-9838-8.
[2]   Bhuiyan, M. S. S. (2021). Necessity of ESP Syllabus in the English Language Education of Engineering Students in Bangladesh. *International Journal of Educational Feedback and Applied Linguistics*, *1*(1), 31-38.
[3]   Bracaj, M. M. (2014). Teaching English for Specific Purposes and Teacher Training. *European Scientific Journal*, *10*(2), 40-49.
[4]   Brindley, G. (2001). Outcomes-based assessment in practice: Some examples and emerging insights. *Language Testing*, *18*(4), 393-408, https://doi.org/10.1177/026553220101800405.
[5]   Carter, R. & Mcrae, J. (eds). (1996). *Language, Literature and the Learner: Creative Classroom Practice*. Harlow: Longman
[6]   Clement, A., & Murugavel, T. (2015). English for Employability: A Case Study of the English Language Training Need Analysis for Engineering Students in India. *English Language Teaching*, *8*(2), pp. 116-125, doi:10.5539/elt.v8n2p116
[7]   Creswell, J. W., & Creswell, D. J. (2017). *Research design: Quantitative, qualitative, and mixed methods approach* (Fifth Edition). SAGE Publications Inc.

[8]   Eshreteh, M. K. M., & Siaj, A. H. (2017). Attitudes of English-Major Students and Teachers towards Using Blended Learning in the English Department at Hebron University. *International Journal of Research in English Education*, *2*(4), 51-65, DOI: 10.29252/ijree.2.4.51.

[9]   Gözüyeşil, E. (2014). An Analysis of Engineering Students' English Language Needs. *Procedia - Social and Behavioral Sciences*, *116*, 4182 – 4186, https://doi.org/10.1016/j.sbspro.2014.01.913

[10]   Hargreaves, A., & Fullan, M. G. (1992). *Understanding teacher development*. New York: Teachers College Press.

[11]   Ibrahim, A. S. E. M. (2016). ESP Needs Analysis: A Case Study of PEH Students, University of Khartoum. *Sino-US English Teaching*, *13*(12), 905-923.

[12]   Kainth, M. K.& Kumar. M. (2014). Teaching English Language at Engineering and Technology Institutes in India: Problems and Remedies. *International Journal of English and Literature*, *4*(2), pp. 15-22.

[13]   Karim, A. & Mohamed, A. R. (2019). Examining the impact of an English in action training program on secondary-school English teachers' classroom practice in Bangladesh. *The Qualitative Report*, *24*(3), 441–469, https://doi.org/10.46743/2160-3715/2019.3703

[14]   Khan, M. E. I., Siddique, M. A. B., & Shiblu, M. N. H. S. (2020). Custom Practices of English Education at the Rural Primary Schools in Bangladesh. *International Journal of Learning, Teaching and Educational Research*, *19*(11), 71-87, https://doi.org/10.26803/ijlter.19.11.5.

[15]   Kim, H. H. (2013). Needs Analysis for English for Specific Purpose course Development for Engineering Students in Korea. *International Journal of Multimedia and Ubiquitous Engineering*, *8*(6), 279-288, http:// dx.doi.org/10.14257/ijmue.2013.8.6.28.

[16]   Krathwohl, D. R. (2009). *Methods of Educational and Social Science Research: The Logic of Methods* (3rd Edition). Waveland Press, Inc.

[17]   Latha, K. (2014). Role of English Language for Engineering Students. *American International Journal of Research in Humanities, Arts and Social Sciences*, *9*(3), pp. 47-62, doi:10.24247/ijeljun20195

[18]   Likert, R. (1932). *A technique for the measurement of attitudes*. Archives of Psychology, *22*(140), 1–55.

[19]   Mahmood, S. (2014). Teaching English to Engineering Students through Innovative Techniques. *Journal of Education and Practice*, *5*(8), 192-197.

[20]   Marshall, C., and Rossman, G. B. (1999). *Designing qualitative Research*, 3rd ed. Thousand Oaks, CA: Sage Publications.

[21]   Ngama, L.P., Tangthonga, N. &Anunvraponga, P. (2015). A Model to Develop the English Proficiency of Engineering Students at Rajamangala University of Technology Krungthep, Bangkok, Thailand. *Procedia-Social and Behavioral Sciences*, *192*, 77-82, https://doi.org/10.1016/j.sbspro.2015.06.012.

[22]   Olds, B., Moskal, B., & Miller, R. (2005). Assessment in Engineering Education: Evolution, Approaches and Future Collaborations. *Journal of Engineering Education*, *94*(1), pp. 13-25. doi: 10.1002/j.2168-9830.2005.tb00826.x

[23]   Pardayevna, K.N., Muxtorjonovich, R.S, Voxidovich, N.A., Sharofiddinqizi, M.O., Anvar, A.S., Xolmaxmatovna, B.S. (2021). ESP (English for Specific Purposes) Teaching Process, Methods, Assessment and Issues. *Journal of Contemporary Issues in Business and Government*, *27*(1), pp. 192-202.

[24]   Rahman, M, M. Islam, S., Karim, A., Chowdhury. T. A., Rahman. M. M., Seraj, P, M, I. and Singh, M, K, M. (2019). English language teaching in Bangladesh today: Issues, outcomes and implications. *Language Testing in Asia*, *9*(9), doi: https://doi.org/10.1186/s40468-019-0085-8

[25]   Rahman, M. M. Pandian, A., and Kaur, M. (2018a). Factors affecting teachers' implementation of communicative language teaching curriculum in secondary schools in Bangladesh. *The Qualitative Report*, *23*(5), 1104-1126, doi: https://doi.org/10.46743/2160-3715/2018.3220

[26]   Rahman, M. M., Singh, M. K. M., and Karim, A. (2018b). English medium instruction innovation in higher education: Evidence from Asian contexts. *Journal of Asia TEFL*, *15*(4), 1156-1164, doi: https://doi.org/10.18823/asiatefl.2018.15.4.20.1156.

[27]   Rahman, M. M. & Pandian, A. (2018c). A critical investigation of English language teaching in Bangladesh: Unfulfilled expectations after two decades of communicative language teaching. *English Today*, *34*(3), 43-49. https://doi.org/10.1017/S026607841700061X

[28]   Rahman, M., Hussain, N., & Uddin, K. (2017). Evaluating English Language Courses of Engineering Universities in Bangladesh: Insiders' Perceptions. *NAEM Journal*, *12*(24), 113-123.

[29]   Riemer, J. (2002). English and Communication Skills for the Global Engineer. *Global Journal of Engineering Education*, *6*(1), 91-100, Published in Australia.

[30]   Santos, L. M. D. (2019). English language learning for engineering students: application of a visual-only video teaching strategy. *Global Journal of Engineering Education*, *21*(1), pp. 37-44.

[31]   Shaheen Ṛ., Hassan, M, M.& Paul, A, K. (2013). *Learning English: Its use and benefits Views from Bangladesh*. Conference Paper of 6th BELTA International Conference, 18-20 January 2013. NAEM, Dhaka

[32]   Shamrao, M.V. (2013). Importance of English Communication for Engineering Students from Rural Areas and Its Remedies. *IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE)*, Second International Conference on Emerging Trends in Engineering (SICETE), *Volume-02*, pp. 39-42.

[33]   Sultana, S., & Dovchin, S. (2019). Relocalisation in digital language practices of university students in Asian peripheries: Critical awareness in a language classroom. *Linguistics and Education*, doi:10.1016/j.linged.2019.100752

[34]   Sultana, N., Sultana, F., & Zakaria, AKM. (2019). An Evaluation of Fundamental English Courses: a scrutiny of Their Effectiveness at an Engineering University, Bangladesh. *International Journal of English and Literature*, *9*(3), 47-62.

[35]   Tasić, M. (2009). English Language Teaching in Mechanical Engineering. *Linguistics and Literature*, *7*(1), 101 – 112.

[36]   Tashakkori, A., & Teddlie C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage

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Cognitive Strategies Employed in Tackling Lexical Problems in Second Language Learning: A Psycholinguistic Study

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Abstract—This study sheds light on the lexical choice difficulty encountered by advanced learners of English by analyzing the lexical choice errors committed by a group of Jordanian students majoring in English. A task was set for 40 students to translate from Arabic into English several sentences including lexical items whose specific senses restrict their use and applications in a particular context and within certain collocational patterns. The sources of the errors were identified and categorized. In backtracking the sources of the errors in each category, the study attempts to deduce the possible cognitive strategies employed by the students in dealing with a lexical choice difficulty. Hence, the study provides psycholinguistic empirical evidence on the lexical retrieval processes and strategies employed by second language (L2) learners in tackling lexical choice problems. Results of the study revealed that the students employ a range of first language (L1)-based and L2-based lexical retrieval strategies such as semantic association, semantic analogy, approximation and derivations.

Index Terms—lexical choice errors, lexical retrieval strategies, error sources, interlingual errors, intralingual errors

I. INTRODUCTION

Lexical knowledge plays an integral role in second language (L2) acquisition. No doubt, vocabulary (lexes) is an essential part in L2 acquisition. Harley (1996) maintains that lexical knowledge plays a fundamental role in developing L2 proficiency (p.150). Such knowledge constitutes the "cornerstone" with which learners commence in acquiring such vocabulary. Accordingly, lexes are the "building blocks" of a language and one cannot think that language acquisition whether first, second, or foreign could take place without considering its vocabulary (Naba'h, 2011; Shormani, 2014; Khuwaileh, 1995). It is a fact that language acquisition begins with words as they are simply the first thing learners acquire (Llach, 2005, p. 46). In addition, as far as the communication process is concerned, it is the vocabulary knowledge and the ability to use them successfully that makes a particular learner more proficient than another. Hatch (1983) emphasizes the crucial role of vocabulary in communication as they are the fundamental linguistic elements that "will make communication possible" (p.237). Moreover, within academic settings vocabulary knowledge is crucial in effective writing (Manchon et al., 2007, p.150). However, among the many studies conducted on L2 acquisition, the vocabulary research has been a neglected area. Many researchers maintained that the main emphasis in L2 acquisition study has been on grammar and phonology (Richards, 12015; Ellis, 1997; Taylor, 1990, cited in Naba'h, 2011, p. 50). Moreover, the studies that are particularly concerned with lexical errors are still relatively limited in scope and number. Shormani (2012) attributes this to "the fact that semantic knowledge is difficult to assess" (p. 43).

Despite the great efforts exerted in research on the acquisition of L2 vocabulary and more specifically lexical errors L2 learners commit, there are some issues and questions to be explored. Only relatively few studies have investigated L2 lexical errors; however, such studies are not satisfactory as they addressed only "a relatively limited number of lexical errors categories" (Hemchua & Schmitt, 2006, p. 3). Moreover, there are even fewer studies that have tackled the sources of such errors. Thus, the present study attempts to probe deeply into the possible sources of lexical errors and explore the cognitive processes involved in dealing with a lexical choice difficulty.

II. OBJECTIVES

This study aims at investigating the possible sources of lexical errors committed by advanced learners majoring in English. In other words, the study tries to identify what makes a learner commit a particular error. In fact, the study more specifically attempts to answer the questions: (1) Is it the first language (L1; Arabic) that causes errors related to the lexical choice or L2 (English)? and (2) What strategies are employed in retrieving a suitable lexical item? Do learners adopt L1-based or L2-based lexical retrieval strategies?

III. DEFINITIONS OF TERMS

Lexical error

A lexical error within this study is defined as a deviation committed at the lexical choice level due to a violation of the lexical rules particular to English (Naba'h, 2011, p. 44).

Interlingual errors (L1 errors)

Interlingual errors are related to the interference in the native language. Such errors occur when the learner's L1 (patterns, systems, or rules) are transferred to L2. In this way, learner's L1 influences the production of L2. The influence will be on any aspect of language: vocabulary, grammar, culturally appropriate language use and so on (Grassi & Barker, 2010, p. 257).

Intralingual errors (L2 errors)

Intralingual errors are attributed to L2, independent of the native language. They are errors that take place due to the misuse of a rule or a faulty generalization of a rule in the target language. The learner in this case tries to generalize a rule that does not apply to the target language (Richards, 2002, p. 267).

Lexical retrieval strategy

Lexical retrieval is an essential process in both native language (L1) and second language (L2) oral and written production. Lexical retrieval processes refer to the access and selection of the relevant lexical items needed to express one's intended meaning in language production activity (Manchon et al., 2007, p.150).

IV. METHODOLOGY

A. Participants

The present study intends to analyze the lexical choice errors committed by some Jordanian university students majoring in English language and literature and probe deeply their possible sources. In the same vein, in tracking back the sources of such errors, the study intends to deduce the possible cognitive strategies employed in dealing with a lexical choice difficulty.

In academic settings, it is widely held that a learner can learn a word easily, but it is difficult to use it in an appropriate context unless he/she has practiced using it recurrently. Consequently, to study lexical errors and lexical choice difficulty, the participants should be of an advanced level having a high level of proficiency. Thus, a task was set for 40 university students to translate from Arabic into English several sentences including lexical items whose specific senses restrict their use and applications in particular context and within certain collocational patterns and hence might constitute a lexical choice difficulty for learners (see appendix 1). To elicit simultaneous responses from the students, some simple sentences with simple lexical items were inserted between the target sentences in order not to draw their attention to the lexical items in question (those confusing items). The age of the participants ranged from 18-24 years. They were all female. They had studied English for about sixteen years (12 at school and four at university). They had studied several courses like those of a practical nature (skills) such as reading, writing, and speaking, those of theory such as syntax, semantics, and sociolinguistics, and literature courses such as novel, drama, and short story.

B. Procedure

The students interpreted the sentences without an aid of a dictionary. All the errors committed by students in this test were spotted and collected. Errors on the syntactic, spelling, and lexico-grammatical were all excluded. To investigate the source of lexical choice errors, a classification of the errors was made. The classification was developed on the base of an amalgam of classifications taken from Shormani (2014), Shormani and Sohbani (2012), Naba'h (2011), and Abisamra (2003) in addition to the researcher's own classification into categories based on the corpus of study. Errors exemplifying each category (errors sources) were analyzed to find out what strategies (lexical retrieval strategies) were followed in the interpretation of such lexical items, i.e., retrieving the relevant suitable lexical items. In doing so, the study provides psycholinguistic evidence of the factors and processes involved in tackling lexical choice problems.

V. CLASSIFICATION OF LEXICAL CHOICE ERRORS

An analysis of the collected errors derived five categories in which the identified lexical errors were classified. The categories are listed below in table 1:

TABLE 1
SUMMARY OF LEXICAL CHOICE ERROR CATEGORIES

1.	Assumed Synonym
2.	Analogy
3.	Lack of Vocabulary Knowledge
4.	Paraphrase
5.	Literal Translation

As Table 1 above shows, there are five categories in which the lexical errors identified in this study were classified. Error frequency, category, and source's frequency and percentage for each of the following categories. It should be noted here that every example presented below involves only one single lexical error though in its original form (as written by the participant), it might have more than one error and of different type(s) (see Appendix 2)

TABLE 2
LEXICAL ERRORS

Category	L1-interference		L2-influence		Total	
	F	%	F	%	F	%
Assumed Synonymy	15	17	24	28	39	**45**
Analogy	1	1	18	21	19	**22**
Lack of Vocabulary Knowledge	--		12	14	12	**14**
Paraphrase	4	5	6	7	10	**9**
Literal Translation	4	5	3	3	7	**8**
Total	24	28	63	72	87	**100**

As presented in Table 2 above, the errors identified in the corpus are analyzed in terms of the abovementioned five types of sources, source's frequency and percentage for each of the following categories. It should be noted here that every example presented below involves only one single lexical error though in its original form (as written by the participant), it might have more than one error and of different type(s) (see Appendix 2).

A. Assumed Synonymy

Synonymy is a lexical phenomenon that exists in all languages. For instance, the words 'large' and 'big' are synonymous; they both describe the general size of something. However, the former is used with clothing and food while the later not, e.g., a blouse can be a large size but not a big size or when ordering coffee, it can a large coffee but not a big one (Wehmeier, 2005). As far as the process of L2 is concerned, the existence of such a phenomenon will be a source of confusion and difficulty for learners leading to what is called *assumed synonymy* which is the main concern of this study. This simply implies that L2 learners assume that two or more words are synonymous and so can be used interchangeably in an L2. An analysis of the data shows that L1-interference and L2-influence are the cause of the errors committed due to assumed synonymy. Assumed synonymy scores the highest number of errors with 39 errors accounting for 45% and was distributed as follows: L1-interference with 15 errors (17%) and L2-influence 24 errors (28%). These different sources are exemplified below and supported by examples from the corpus of the study.

(1) *Where is the English section? (department)
(2) * The main components of a short story. (elements)
(3) * Toys section. (department)
(4) * The branch of the ICU. (section)
(5) * The department of history book. (section)

In (1) to (5), the learner uses 'section' for 'department', 'department' for 'section', and 'components' for 'elements'. These errors are ascribed to different sources. For instance, in (1), the error is ascribed to Arabic which is caused by hypothesizing a one-to-one correspondence between English and Arabic because 'department' and 'section' have the same equivalence in Arabic, i.e., **'qism'.** The error in (2) is ascribed to L2-influence. In English the words 'components' and 'elements' are applied in different context. Though both words refer to 'part of something', there are subtle differences between them in use. The word 'component' is commonly used to describe parts of concrete objects (especially a machine parts) while 'elements' describe abstract items. Thus, in retrieving the appropriate lexical item, the learner here seems to approximate the meaning of 'elements' (ʕanasˁir alqisˁah/elements of a story) by opting for the word 'components'. One can claim the learner uses **meaning approximation** as an L2-based lexical retrieval strategy. One could think that this error can be ascribed to Arabic; however, the Arabic equivalent of 'components' **'aʒzaʔ'** is not applied to describe 'elements of a story'. The Arabic word '**ʕanasˁir'** is used instead (ʕanasˁir alqisˁah not **aʒzaʔ**). Thus, an L1-interference seems not to be possible here.

B. Analogy

This category scored the second highest rank in error accounting for 19 errors (22%). Analogy is considered a learning strategy which indicates that the learner plays an active role in the learning process (not a passive interlocutor in the learning process) as he/she sometimes indulges in analogical thinking in dealing with a particular difficulty. However, in most of the cases, it becomes an error. This category included 19 errors (22%) distributed as follows: L1-interference with 18 errors (21%) and L2-influence with 1 error (1%). Consider examples (6) - (10) exemplifying this issue.

(6) * The tittles of the army. (divisions)
(7) *The deepest place of the lake. (part)
(8) * The materials of this pie. (ingredients)
(9) * We need a resolution for this typewriter (repair)

In example (7), the learner uses the word 'place' for 'part'. It seems that the error is ascribed to Arabic because the learner analogizes the use of 'place' for 'part'. The participant uses the adjective 'deep' (**ʕami:q**) in connection with 'place' influenced with Arabic semantics where it is possible and acceptable to use these words together as in **'almakan alaʕmaq'**. Errors in (6), (8), and (9) are ascribed to English. In (6), the learner draws an analogy between 'tittles' and 'divisions' of an army. It seems that the semantic association between army and tittles is more persistent in the mind of the learner than it is with the actual divisions of army. Thus, it seems that in trying to retrieve the appropriate relevant lexical item in this context (divisions) the learner has had an easier access to the word 'tittles' as it is more semantically

persistent with the word 'army'. In (8), the learner analogizes the use of 'materials' with 'ingredients' as the former refers to 'substance that things/cloth can be made of'. Similarly, the learner in (9) uses 'resolution' for 'repair'. It seems that there is analogy made between the problem involved in the given situation in the sentence (a problem with a typewriter) and the word 'resolution' that is used in association with a problem. Considering the type of strategy followed by the students, it seems that semantic relatedness/association seems to be at play here. The students in trying to retrieve the relevant lexical items make a kind of cognitive semantic associations or connections. This kind of strategy is based on making analogies and associations between the words in the learners' repertoire.

C. Lack of Vocabulary Knowledge

Some of the examined errors indicate a lack of English vocabulary knowledge. This category scores 12 errors (14%). Examples (10) and (11) illustrate the point in question.

(10) * What are the <u>instructions</u> of this pie. (ingredients)

(11) *We need to <u>demand</u> this typewriter. (repair)

The learners committing such errors might lack the simplest basic knowledge of English vocabulary. The lexical difficulty encountered when interpreting some of the sentences seems to be dealt with passiveness. No specific active strategy can be deduced from the errors. For instance, the learner uses 'instructions' and 'demand' for 'ingredients' and 'repair' respectively. No strategy of semantic analogy or association can be deduced from such errors. For instance, in (10) and (11), there seems to be no connection in terms of semantic senses between the words 'instructions' and 'ingredients' and 'demand' and 'repair' in English or in Arabic. Thus, one can claim that this seeming passiveness with which such lexical difficulty is dealt with can be attributed to a lack of vocabulary knowledge.

D. Paraphrase

Shormani (2012a) defines paraphrase as a restatement of a word, phrase, or sentence in different words. In this study, paraphrase is confined only to the word and phrase levels. In fact, paraphrase is considered one of the most fundamental language learning strategies. However, what happens sometimes is that the L2 learners cannot find the exact word/phrase to be used in a context, so they try to exploit a paraphrasing strategy but the outcome is not as expected, hence resulting in an error. This category scores the fourth highest number of errors. It scores 10 errors (9%) distributed as follows L1-interference includes 4 errors (5 %) and L2-influence includes 6 errors (7%). Examples (12) – (15) illustrate this point.

(12) *The <u>obligatory parts</u> of the English sentence in syntax. (constituents)

(13) *I want the <u>big one</u> of the spaghetti. (portion)

(14) *I want the <u>big shot</u> of the spaghetti. (portion)

(15) * I want the <u>lion meal</u> of the spaghetti. (portion)

In (12), the learner substitutes 'obligatory parts' for 'constituents'. In (13) - (15), 'big one', 'big shot', and 'lion meal' are used as a substitute for 'the biggest portion'. The error in (12) is ascribed to L1-interference where the learner having Arabic as a knowledge base has used 'obligatory parts' ('**alʕanasˤir alasasiah liljumlah**'). This is not accurate and acceptable in this English sentence where the word 'constituent' is the adequate equivalent. In fact, there is no exact one lexical item substitute/equivalent for this word in Arabic. The exact meaning which this word designates in English is captured by a phrasal paraphrase in Arabic rather than one single substitute, and this might have contributed to such a lexical choice difficulty. Hence, substitution is used here as an L1-based lexical retrieval strategy. The examples (13) – (15) are ascribed to L2-influence simply because the exact equivalent of the Arabic word '**ħisˤsˤah**' (**al hisˤsˤah alʔakbar min almaʕkarownahunah)** does exist in English (portion). However, being unable to retrieve this relevant lexical item, the learner uses the English phrases 'big one', 'big shot', and 'lion meal' as a substitute. As far as the error in (15) is concerned, it seems that the learner confuses the phrase 'the lion meal' with the 'lion share'. Accordingly, the l2-based lexical retrieval strategy is at work here.

E. Literal Translation

As shown in Table 1 above, this category scores 7 errors (8%). In fact, literal translation is considered a learning strategy (compensatory strategy) which a learner uses when he/ she fails to express himself/herself (Kroll & Groot, 2005, p.138). This category includes both L1-interference errors and L2-influence errors distributed as 4 errors (5%) and 3 errors (3%) respectively. The errors in (16) - (19) exemplify such a category.

(16) * Where is the ICU <u>unit</u>? (section)

(17) *I want the biggest <u>lesson</u> of this spaghetti (portion)

(18) * What are the <u>makers</u> of this pie? (ingredients)

(19) * What are the <u>containings</u> of this pie? (ingredients)

The errors in (16) and (17) are ascribed to L1-interference where the learner uses the words 'unit' and 'lesson' for 'section' and 'portion', respectively. Here, the learner is influenced by Arabic as the word 'unit' '**wiħdah**' is used in connection with 'ICU Section' as in '**wiħdaht alʕinajah almurakkazah**' 'وحدة العناية المركزة'. Similarly, the word '**ħisˤsˤah**' in Arabic has two meanings; it means 'class/lecture' and 'share'. It seems that in trying to deal with the difficulty of retrieving the adequate lexical item here, the learner has relied on the literal translation of the word '**hisˤsˤah**' from Arabic into English. Thus, the learner employs an L1-based lexical retrieval strategy here. The errors in

(18) and (19) could be ascribed to L2-influence. It seems that the learner, through the strategy of derivation, has employed the literal senses of the English words 'makers' and 'containings' to encapsulate the meaning of 'ingredients' in the given sentence. The insufficient knowledge in L2 lexes to distinguish between 'ingredients' and 'containings' leads the learner to exploit the English sense of 'contain' and apply it through the process of derivation as a substitute for the word 'ingredients'. Hence, the learner here applies the process of derivation as an L2-based retrieval strategy to deal with such a lexical choice problem.

VI. CONCLUSION

The study highlights the importance of lexical knowledge in the L2 acquisition process. As presented in Table 1 earlier, where the frequency of total errors committed was 87 errors, lexical errors will constitute a barrier for advanced learners in the learning and communicative process. The collected data showed two main categories of errors: interlingual and intralingual errors. Interlingual errors accounted for 28% and intralingual errors accounted for 72% of the total number of errors. This could be related to the fact that most of the participants of the study are advanced learners and so the possibility of L1-inteference is limited. A thorough analysis of the errors revealed that the students employ a range of L1-based and L2-based lexical retrieval strategies such as semantic association, semantic analogy, approximation, and derivations. However, in some instances where there is insufficient knowledge of the lexis in L2, the learners seem to act passively when dealing with a lexical choice problem. This is revealed in the random arbitrary lexical choices under the category of lack of vocabulary knowledge where the errors do not indicate any kind of active retrieval strategy.

APPENDIX 1

Age   Year of Study

18-20   22-24   25-30   First   Second   Third   Fourth

Circle your evaluation (overall average) at the university:

Excellent   Very Good   Good   Fair

Please translate the following sentences from Arabic into English

أعطني قطعة من الكعك من فضلك (cake)	ما هي مكونات هذه الكعكة؟
أين قسم العناية الحثيثة (ICU)؟	نحتاج الى اصلاح هذه الالة الطابعه
انظر فوق	كيف حالك؟
أين قسم الالعاب؟ (toys)	اريد الحصة الاكبر من المكرونه
اين كتابي؟	قسم كتب التاريخ في المكتبة
هذا الجزء من يدي يؤلمني	ما هي اجزاء هذه الالة الحاسبه ؟
الاجزاء الاساسيه للجملة في علم النحو (Syntax)	هذا هو الجزء الاعمق من البحيرة
عدد لي عناصر القصة القصيره	أين قسم اللغة الانجليزيه؟
تم اصلاح السيارة	جميع فروع البنك موجودة في الاردن
	التقسيمات في الجيش

APPENDIX 2

Literal Translation

Responses	Frequency
What are the parts of this calculator? (components)	5
Where is the ICU unit?	3
What are the containings of this pie?	1
What are the makers of this pie?	2
We need to reform this typewriter	1
The care was reformed	1
I want the biggest lesson of this spaghetti	1

Analogy

Responses	Frequency
I want the biggest share of this spaghetti	1
Tittles of the army	1
This is the deepest fraction of this lake	1
This is the deepest segment of this lake	1
This is the deepest place of this lake	1
The portion of the lake	2
What are the most parts of an English sentence	1
What are the materials of this pie	2
We need a resolution for this typewriter	1
What are the units of this calculator?	1
The segment of the calculator	1
What are the equipments of this calculator?	1
The tools of this calculator	1
What are the main parts of the English sentence in syntax	2
I want the lion meal of this spaghetti	1
I want the lion share of this spaghetti	1
Mention the themes of a short story	3
Mention the parts of a short story	1
Mention the features of a short story	1
We need to maintain this typewriter	1
Separated parts of history books in the library	1
Divid of history books	1
The ICU station	1
The deepest point of a lake	1
The deepest place of a lake	1
We need to improve this typewriter	1
Tittles of the army	1
Ramifications of the bank	1
Subdivisions of the bank	1
Apportionments of the Army	1
Army segments	1

Assumed Synonymy

Responses	Frequency
Where is the English section?	5
Mention the main components of a short story	1
We need to fix this typewriter	5
What are the parts of this calculator?	7
The constituent of this calculator?	1
The sections of the army	2
The branches of the army	1
The portions of the army	1
The departments of the army	2
Where is the branch of the ICU	1
ICU department	4
I want the largest segment of this spaghetti	1
The constituent amount of this	1
The biggest piece of spaghetti	3
The biggest part of spaghetti	2
Toys section	15
Toys branch	1
The car was repaired	3
The portions of the bank	4
Department of history book	1
Branch of history books	1

Lack of Vocabulary Knowledge

Responses	Frequency
All of the parts of the bank are in Jordan	1
All of the section of the bank are in Jordan	1

The <u>places</u> of the bank	1
We need to <u>demand</u> this typewriter	1
The car was <u>demanded</u>	1
The <u>part</u> of history books in the library	3
Where is the English <u>part</u> (department)	1
Where is the toys <u>part</u>?	2
This <u>segment</u> of my hand hurts me	1
Mention the <u>parts</u> a short story	1
Mention the <u>factors</u> of a short story	1
Where is the ICU <u>part</u>	2
What are the <u>instructions</u> of this pie?	1
Toys <u>part</u>	2
The car was <u>corrected</u>	1
The <u>Part</u> of the bank	1
This <u>portion</u> of my hand	1

Paraphrase

Responses	Frequency
What are the <u>main parts</u> of the English sentence in syntax	4
What are the <u>main categories</u> of the English sentence in syntax	1
The <u>obligatory parts</u> of a sentence	1
The main <u>elements</u> in a sentence	1
The main <u>components</u> of a sentence	1
What are the <u>basic parts</u> of the English sentence in syntax?	5
I want the <u>big one</u> of the spaghetti	1
I want the <u>big shot</u> of the spaghetti	1

REFERENCES

[1]   AbiSamra, N. (2003). *An analysis of errors in Arabic speakers' English writing.* Retrieved on Dec 28, 2015 from: http//abisamra03.tripod.com/nada/languageaca-erroranalysis.html

[2]   Grassi, E. A., & Barker, H. B. (2010). *Culturally and linguistically diverse exceptional students: Strategies for teaching and assessment*. Sage.

[3]   Harley, B. (1996). Introduction: vocabulary learning and teaching in a second language. *Canadian modern language review*, *53*(1), 3-12.

[4]   Hatch, E. M. (1983). *Psycholinguistics: A second language perspective*. Newbury House Publishers, Inc., Rowley, MA 01969.

[5]   Hemchua, S., & Schmitt, N. (2006). An analysis of lexical errors in the English compositions of Thai learners. *Prospect, 21 (3), 3-25.*

[6]   Khuwaileh, A. (1995). Words and context in EFL. *Grazer Linguistische Studien*, *(44)*, 27-36.

[7]   Kroll, J. F., & De Groot, A. M. (Eds.). (2005). *Handbook of bilingualism: Psycholinguistic approaches*. Oxford University Press.

[8]   Lado, R. (1964). *Language teaching: a scientific approach*. McGraw- Hill.

[9]   Llach, M. D. P. A. (2005). The relationship of lexical error and their types to the quality of ESL compositions: An empirical study. *Porta Linguarum: revista internacional de didáctica de las lenguas extranjeras*, *(3)*, 45-57.

[10] Manchon, R. M., Murphy, L., & de Larios, J. R. (2007). Lexical retrieval processes and strategies in second language writing: A synthesis of empirical research. *International Journal of English Studies*, *7*(2), 149-174.

[11] Naba'h, A. A. (2011). Lexical errors made by in-service English language teachers in Jordan. *Damascus University Journal*, *27*(1), *49-75.*

[12] Richards, J. C. (2002). *Longman language teaching and applied linguistics*. Pearson Education.

[13] Richards, J. C. (2015). *Error analysis: Perspectives on second language acquisition*. Routledge.

[14] Shormani, M. (2012). *L2 acquisition in the Arab World: An empirical study of Yemeni learners' English syntactic and semantic error gravity*. LAP LAMBERT Academic Publishing.

[15] Shormani, M. (2014). Lexical choice difficulties: A psycholinguistic study towards a solution. *Journal of Literature, Language and Linguistics-An Open Access International Journal 4,* 43-53.

[16] Shormani, M. Q., & Sohbani, Y. A. (2012). Semantic errors committed by Yemeni university learners: Classifications and sources. *International Journal of English Linguistics*, *2*(6), 120-139.

[17] Wehmeier, S. (2005). *Oxford advanced learner's dictionary*. Oxford University Press.

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Saudi Learners' Perceptions of Academic Writing Challenges and General Attitude Towards Writing in English

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Abstract—Second language (L2) academic writing is one of the most fundamental, yet sophisticated skills for university students to master. It requires the ability to not only create ideas using sentences, but also construct meaningful, logical and comprehensible texts. Thus, understanding students' attitudes towards L2 writing and exploring the challenges that they experience while composing texts are necessary for L2 teachers and curriculum designers. The overall goal of this study is twofold: (1) to investigate students' perceptions of the difficulty that they experience while writing academic texts in English and (2) to explore learners' attitudes towards writing assignments in English. The goal here is to explore these issues using data obtained from 109 Saudi university students. Data were first collected using a questionnaire and then quantitatively analysed. The results show that students tend to perceive academic writing as challenging and adopt a mildly to moderately positive attitude towards writing in English. These findings offer some implications for teachers and curriculum designers to improve the L2 academic writing skills of students.

Index Terms—L2, positive attitude, negative attitude, academic writing, writing challenges, perception

I. INTRODUCTION

Academic writing is a very important area of research. This is because it has mainly become an increasingly important part of university and college learning. Overall, the interplay among social, educational, linguistic and cognitive factors seems to shape the development of the writing ability, resulting in true challenges for second language (L2) writers (Manchon, 2009). Hence, it is important to find solutions to the numerous writing problems that writers face. The social context is the factor that allows L2 writers to form their conceptions of writing, including their motivation and perspective towards writing, which affect their writing performance. Some educational factors, such as the amount and type of instruction received, also have an effect on the development of the writing ability for writers. It is also worth mentioning that the cognitive skills, writing competence and writing approaches of writers have a great impact on their writing abilities. Indeed, several linguistics factors, which are present in writers' linguistic knowledge and language transfer, play an essential role in shaping their writing performance (Manchon, 2009).

Several researchers have described academic writing as the production and logical organisation of sentences in paragraphs to express specific ideas (Hyland, 2003; Kroll, 1994; Manchon & Matsuda, 2016). For example, Hyland and Hyland (2006) stated that writing is context-embedded and can be understood only from the perspective of society rather than from that of a single individual. Manchon and Matsuda (2016) and Elsherif (2012) indicated that one of the basics of academic writing is the ability of learners to find and access relevant resources, to evaluate such resources in order to arrange their ideas and to insert their opinions in order to develop their own voice. Since academic writing is a product of the mental processes of writers, it is considered a cognitive activity (Manchon, 2009). Given these three different perspectives, it can be concluded that academic writing involves a variety of aspects that operate together in a complex process and require a deep understanding from the educators' side and specific skills from the language learners' side.

As most subjects nowadays are delivered in English, students need to compose their ideas and write their assignments also in English. They need to overcome the challenges of writing and to master the skills of academic writing to succeed in their courses. This, however, results in great difficulties for L2 students, who learn English as a second language (ESL) and study other subjects through the medium of English (Hinkel, 2020). This problem causes L2 university students to form specific attitudes towards writing in English and to encounter challenges when composing texts while simultaneously trying to fulfil the requirements of their academic context. This whole notion stems from the fact that academic writing generally causes frustration for university students, as they perceive themselves as lacking the L2 language proficiency required at the academic level (Hyland, 2002). Thus, these challenges and attitudes are two related factors that may complicate academic writing for L2 students.

Purpose of the Study

According to the above-mentioned literature, and from the researcher's own experience in language teaching, many L2 students fail to meet the requirements of the institutes that they study at in terms of producing a well-written form of

academic text that meets the expectations of their instructors. It is also worth highlighting that little research has been performed to detect and identify the reasons for students' low English writing performance. Thus, it is important for language teachers and curriculum and course designers to understand the root cause of students' writing difficulties that negatively affect their writing abilities. Since the attitude of students towards academic English writing might impact their challenges, or vice versa, either negatively or positively, the current study had two goals: (1) to examine Saudi students' attitudes towards writing in English and (2) to investigate the L2 academic writing challenges that students face.

II. LITERATURE REVIEW

A. Academic Writing

Academic writing is a complex process that is neither easy nor spontaneous for many L2 writers. It is the result of employing different strategies to manage the composition process, which involves gradually developing a complete text. Composition process involves activities such as setting goals, generating ideas, organising information, selecting appropriate language, making drafts, reading, reviewing, revising and editing (Hedge, 2014). Earlier studies have shown that interest has started to shift from textual features presented in orthography, sentence structure and discourse-level structure to the process of writing itself, focussing on investigating the processes underlying the production of written discourse (Kroll, 2008).

Several researchers have identified the characteristics of the writing process. For example, Hedge (2014) asserted that writing is a recursive and generative process, with students re-reading their work, assessing it, reacting and moving on. In this vein, two types of writing have been distinguished: knowledge telling and knowledge transformation. On the one hand, knowledge telling is the easiest form of writing, which is accessible to all language users. On the other hand, knowledge transformation requires thinking about a topic, obtaining the information needed for analysis and modifying one's thinking strategy. This type of writing causes writers to expand their knowledge and develop new ideas by processing new information (Hinkel, 2020). In another study, Tribble (1996) classified the most important characteristics of academic writing: organising writing to convey major and supporting ideas; using relevant reasons and examples to enhance a position; demonstrating a command of standard written English, including grammar, phrasing, effective sentence structure, spelling and punctuation; manifesting facility with a range of vocabulary appropriate to the topic; and showing awareness towards the audience and writing for a particular reader. The author also listed the four frequent writing tasks in colleges and universities: analytical writing, extracting information, summarising important points and developing factual reports and observations (ibid). In general, the writing process includes various stages: pre-writing, drafting, revising, editing and finally publishing (Sari et al., 2020). This means that L2 writers should have various skills to compose well-developed academic texts, such as being able to exploit others' ideas and write them in their own words, creating outlines and summaries, organising ideas and editing drafts (Tribble, 1996).

Writers also need different sorts of knowledge related to content, context, language system and writing processes to compose a well-written text. Gillett et al. (2009) asserted that academic writing requires writers to have specific abilities and to apply various strategies, such as understanding the task at hand, making plans, carrying out research, reading, taking notes, writing descriptively and critically, expressing their own voice and working with feedback.

All of these factors indicate that writing is not a simple cognitive task. It requires complex mental activities that need specific knowledge, skills and processes. Therefore, writing has always been considered as the most challenging skill of language learning for all students, especially if it is required in a foreign language. Thus, it is important to investigate the L2 writing weaknesses of students and shed some light on the obstacles that negatively affect their L2 academic writing.

B. Students' L2 Writing Challenges

Several facts related to students' academic writing challenges have been highlighted in the literature on L2 students' academic writing. For example, in a qualitative study by Altınmakas and Bayyurt (2019) with a small sample size investigating undergraduate Turkish students' writing challenges, the authors showed that the students' previous educational and contextual factors and writing experiences, exemplified in writing classroom instructions and examinations, are the main sources for their writing challenges. Similarly, Qasem et al. (2019) investigated the challenges that final-year undergraduate Saudi students face while writing research projects in English. They found that students face some difficulties in deciding on and understanding the topic for research and finding references. Heo and Sim (2015) investigated the causes underlying the difficulties that Korean learners face while writing English academic texts. They found that students experience challenges with organising their ideas logically and coherently. They also highlighted that the lack of learning experience and linguistic knowledge and the students' inability to find appropriate lexical choices and expressions in English are the most common causes for such writing challenges.

Anderson and Cuesta-Medina (2019) asserted that students face challenges with the rhetorical aspects of L2, which stem from a lack of L2 writing training. Shakib Kotamjani and Hussin (2017) investigated the academic writing challenges postgraduate students face at University Putra Malaysia. They found that students perceive great difficulties with academic writing skills, such as critiquing existing research and determining research gaps. They also found that

writing the introduction, discussing the findings and tying up the loose ends in the conclusion are a source of difficulties in academic writing. In this regard, Akhtar et al. (2020) studied a small number of Malaysian students and found that academic challenges are the main cause for the students' apprehensiveness towards L2 writing. In the same vein, Mahmood (2020) conducted a research exploring the challenges of academic writing that 19 English as foreign language (EFL) learners face in the higher education section of Pakistan. He concluded that finding references and including citations, ensuring cohesion and coherence, choosing a worthwhile topic and focussing on language usage are the greatest sources of the challenges that students experience in academic writing. Likewise, Cennetkuşu (2017) highlighted that the most problematic areas in academic writing for students are the use of proper grammar, connections and transitions, presenting ideas clearly, knowing about different vocabulary and expressions and choosing correct words related to the field.

In another study, Hammad (2016) examined the essay writing skills and obstacles that face Palestinian university students. The results showed that students lack linguistic knowledge, cohesion and academic style and adopt word-for-word translation. Similarly, within the Indonesian context, the researcher found that students dislike writing because of the linguistic problems and cognitive issues related to paragraph organisation and text structure (Rahmatunisa, 2014). In another study, Schneider (2009) found that formulaic writing is one of the reasons why students are not interested in writing, which consequently affects their writing performance.

Difficulties related to the influence of writers' first language (L1) and applying the theories of L1 writing may also have negative effects on the L2 performance of writers (Hinkel, 2020). In this vein, several researchers have asserted that the rhetorical features of certain languages tend to transfer into writers' L2 writing, resulting in challenges and obstacles in L2 writing performance (Cai, 2013; Graham, 2019; Michel et al., 2020).

Together, these studies indicate that most L2 students in different contexts fail to meet the requirements of the institutes that they study at and the expectations of their instructors because of the writing challenges that they experience. However, little research has been conducted to identify the reasons for students' low writing performance in the university context. Therefore, it is important to investigate what other students in different contexts believe hinders their academic writing performance, especially in the Saudi context. It is also very important to investigate students' attitudes towards academic writing, as it is believed that their attitudes can result in various writing challenges and influence the quality of their academic writing and English assignments (Shakib Kotamjani & Hussin, 2017).

C. Students' Attitudes

Attitudes are envisaged and viewed differently by scholars (Chambers, 1999) and are defined in different ways by experts. They are related to preferences, likes and dislikes (Agesty et al., 2021), tendencies towards things (Garrett, 2010) and ideas that influence someone to behave or think in a particular way (ibid). Bartram (2010) viewed attitude as a behavioural intention and part of the human identity (ibid). Attitude helps educators understand human behaviour in terms of one's beliefs and feelings (Garrett, 2010). It also informs educators of their students' performance, such as the way they think, act and behave (ibid). It is a set of values that students bring to the language learning experience (Chambers, 1999). Attitude includes three important categories: cognitive, affective and conative (Mishra & Pani, 2021). The first component refers to one's beliefs and ideas or opinions of something, the second component refers to one's feelings and emotions towards something and the behavioural component refers to one's actions towards an object. For the purposes of this study, attitude is considered to mean the negative or positive ideas or beliefs that evaluate and affect behaviour.

In L2 writing, attitude has a dynamic influence on the individual's response to all subjects in all different contexts. Many factors affect students' L2 writing performance, such as the time to write, writing with a purpose and for an audience and sharing and choosing writing topics (Mishra & Pani, 2021). Over the past few decades, emphasis has shifted to L2 writers' attitudes, motivations and perceptions. According to L2 writing researchers, there is a positive relationship between students' attitudes and their writing behaviour (Hashemian & Heidari, 2013). In other words, students should have a positive attitude towards writing, as this can help them achieve better writing results and save some effort in writing tasks. Agesty et al. (2021) found a positive correlation between students' writing attitudes and their writing performance. All of these studies indicate that the writing attitude influences the writing achievement.

However, earlier studies have shown that L2 student writers who have a negative attitude towards writing often perceive essay composition as a difficult task and dislike the activity altogether. Many researchers have drawn connections between writing attitude and challenges. For example, Erkan and Saban (2011) stated that being successful in L2 writing is related to the attitude and self-perception towards writing. These negative perceptions may be a result of many factors, such as the lack of time to practice writing or an ineffective writing course guide and curriculum. Similarly, Zhu (2001) found that the lack of rhetorical and linguistic knowledge for student writers is the major cause for their negative attitudes towards writing. Jabali (2018) also found that writers who have a positive attitude towards writing perform well in writing tasks. He also found that students' lack of confidence and time constraints are the main causes for their negative attitudes, which hinder their performance. In other words, most of the students who tend to show a negative attitude towards writing make writing mistakes and feel unconfident in expressing their thoughts. According to the literature, the attitudes of L2 learners have been the topic of many studies on language learning. Most of the findings suggest that adopting a positive attitude towards learning has positive effects on the writing performance, and vice versa (Wang, 2010). Thus, it is clear from the thorough literature review that there is a need to study and

understand Saudi students' attitudes towards academic English writing and to explore the factors that affect their writing performance. According to Garrett (2010), there is a relationship between attitude and behaviour, and changing someone's attitude towards something can accordingly change their behaviour.

The L2 writing field is an area of inquiry with a rich and very interesting history. However, there is still a need to understand students' writing challenges in and attitudes towards L2 writing. There has also been considerable interplay over the years between research into writing and learning and instruction in writing. So far, there has been relatively little research focussing on Saudi students' perceived L2 writing challenges and attitudes towards academic writing. Most of the earlier studies have had direct repercussions on classroom practices, and much research has been dedicated within the context of classroom pedagogy and feedback on students' actual writing (Elsherif, 2012; Hyland & Hyland, 2006; Mazgutova & Hanks, 2021; Tsao et al., 2021). Therefore, more research is required to understand how Saudi students view English writing and to identify the challenges that they experience while writing academic assignments.

D. Research Questions

The aim of this study is to answer the following questions:

RQ1: What are the Saudi EFL students' attitudes towards academic writing in general?

RQ2: What are the most and least common challenges perceived by students while writing assignments in English?

RQ3: Is there a significant correlation between students' writing attitudes and writing challenges?

RQ4: Are there differences in students' attitudes and perceived challenges between the following three English-taught tracks: general (ELIA), science (ELIS) and humanities (ELCA)?

III. METHODOLOGY

A. Participants of the Study

The population chosen for this study were undergraduate Saudi female university students studying at King Abdulaziz University in Saudi Arabia. This study was performed on 109 students aged between 18 and 24 with different proficiency levels (pre-intermediate, intermediate and upper intermediate) and studying three different English-taught tracks: general (ELIA), science (ELIS) and humanities (ELCA). Sampling method was also used to recruit the participants, which involved snowballing and asking students enrolled in the researcher's teaching sections and other colleagues teaching in the same field to participate and distribute the survey link to other students.

B. Study Design

This is a descriptive quantitative study that is deemed significant as it sets out to describe and interpret specific phenomena in a specific context. It seeks to address two crucial aspects related to L2 academic writing: students' challenges and attitudes. Finding sound answers can help writing instructors and curriculum designers adopt suitable teaching methodologies to enhance the L2 academic writing skills of university students.

C. Instruments

A questionnaire consisting of three sections (Sections 1, 2 and 3) was used to gather the data. Section 1 includes questions pertaining to the students' demographic information, including their age, level of English proficiency, taught language track, major and year of study. Section 2 consists of 14 questions that aim to identify the challenges that students face while writing in English. Finally, Section 3 contains 15 questions that aim to identify learners' general attitudes towards writing in English. The rating scale used in the current study is the generally used Likert scale with five responses: 1 (*strongly disagree*), 2 (*disagree*), 3 (*neither agree nor disagree*), 4 (*agree*) and 5 (*strongly agree*). Two open-ended questions were also formulated to allow the participants to freely express their opinions regarding whether they find writing assignments in English difficult, the reasons for the difficulties they face and their weaknesses in writing English composition assignments.

To gather data from the participants, two major questionnaires were adopted and modified: the Writing Apprehension Test (WAT), also called the Daly–Miller Test, developed by Daly and Miller (1975), and a questionnaire prepared by Podsen (1997) (cited in Islam, 2017; Setyowati, 2017; Setyowati & Sukmawan, 2018). Several modifications were made to the surveys to suit the purposes, context and students of the current study (see Appendix A).

The questionnaire was designed and distributed online via the SurveyMonkey platform. The typical time spent to fill in the questionnaire was calculated as 12 minutes. To ensure the validity and reliability of the questionnaire, it was reviewed and referenced by several university instructors. It was then piloted with three students and three English teachers. The final version of the questionnaire was modified with the referees' comments and piloting results. Then, the survey was reviewed on the basis of the α-Cronbach coefficient method of correlation and reliability coefficient. With the α-Cronbach formula, the reliability of the questionnaire was found to be 0.92. Next, a bilingual (Arabic and English) questionnaire was prepared to allow the participants to better understand the instructions, questions and items and to proceed at ease while filling in the questionnaire.

Ethical approval for this research was obtained from King Abdulaziz University and the chair of the English Language Institution (ELI). This questionnaire was conducted according to established ethical guidelines, and informed consent was obtained from the participants at the beginning of the online questionnaire.

D. Data Analysis

IBM SPSS Statistics (version 27; IBM Corp., Armonk, NY, USA) was used to analyse the data. Descriptive statistics were used to present categorical variables, whereas continuous variables were presented as the mean ± standard deviation (SD). The difficulties faced by L2 learners were explored using a 12-item five-point Likert scale ranging from 1 to 5 (items 1 and 2 were reverse-scored as they were negatively worded). The total possible score for this scale was 60, with a higher score meaning more difficulties faced by L2 learners. A total of 15 items from another five-point Likert scale, which ranged from 1 to 5 (items 1, 2 and 3 were reverse-scored as they were negatively worded), were used to explore the participants' general attitudes towards writing in English. The total possible score for this scale was 75, with a higher score meaning more positive attitudes towards writing in English. Pearson's correlation coefficient was used to assess the correlation between the difficulties faced by L2 learners (difficulty score) and the participants' general attitudes towards writing in English (attitude score). Analysis of variance (ANOVA) was used to explore the difference in the mean score between different demographic groups. A confidence interval of 95% ($p < 0.05$) was applied to represent the statistical significance of the results, and the level of significance was assigned as 5%.

IV. RESULTS

A. Demographic Characteristics of the Study Participants

A total of 109 students were recruited in this study, most of whom were aged between 18 and 24. In total, 73.0% of the study participants had an English level of 103, and 39.4% of them were in the ELIA study track. Most of the study participants were in their preparatory year of study. For further details on the demographic characteristics of the study participants, refer to Table 1.

TABLE 1
DEMOGRAPHIC CHARACTERISTICS OF THE STUDY PARTICIPANTS

Demographic variable	Frequency	Percentage
Age category		
Below 18 years	6	5.5%
18–24 years	94	86.2%
25–34 years	6	5.5%
35–44 years	2	1.8%
45 years and above	1	0.9%
Level of English		
101	13	11.9%
102	8	7.3%
103	79	72.5%
104	5	4.6%
Pre-intermediate	2	1.8%
Upper intermediate	1	0.9%
Advanced	1	0.9%
Study track		
ELIS	40	36.7%
ELIC	1	0.9%
ELIE	1	0.9%
ELCA	23	21.1%
ELIA	43	39.4%
ELIG	1	0.9%
Year of study		
Preparatory year	98	89.9%
Second year	6	5.5%
Third year	1	0.9%
Fourth year	3	2.8%

B. Difficulties Encountered by ESL Learners

The mean difficulty score for the study participants was found to be 38.6 (SD: 6.8) out of 60, representing 64.3% of the total maximum obtainable score, which reflects a mild to moderate level of difficulty encountered by L2 learners. A total of 12 items were utilised to explore the difficulties encountered by L2 learners. When the participants were asked about the difficulties that they encounter, the most commonly agreed upon difficulties were frequently making common spelling mistakes (56.5%), taking too much time to understand and familiarise themselves with the topic at hand before they start writing (56.5%) and frequently making common grammar mistakes (56.4%) (see Figure 1).
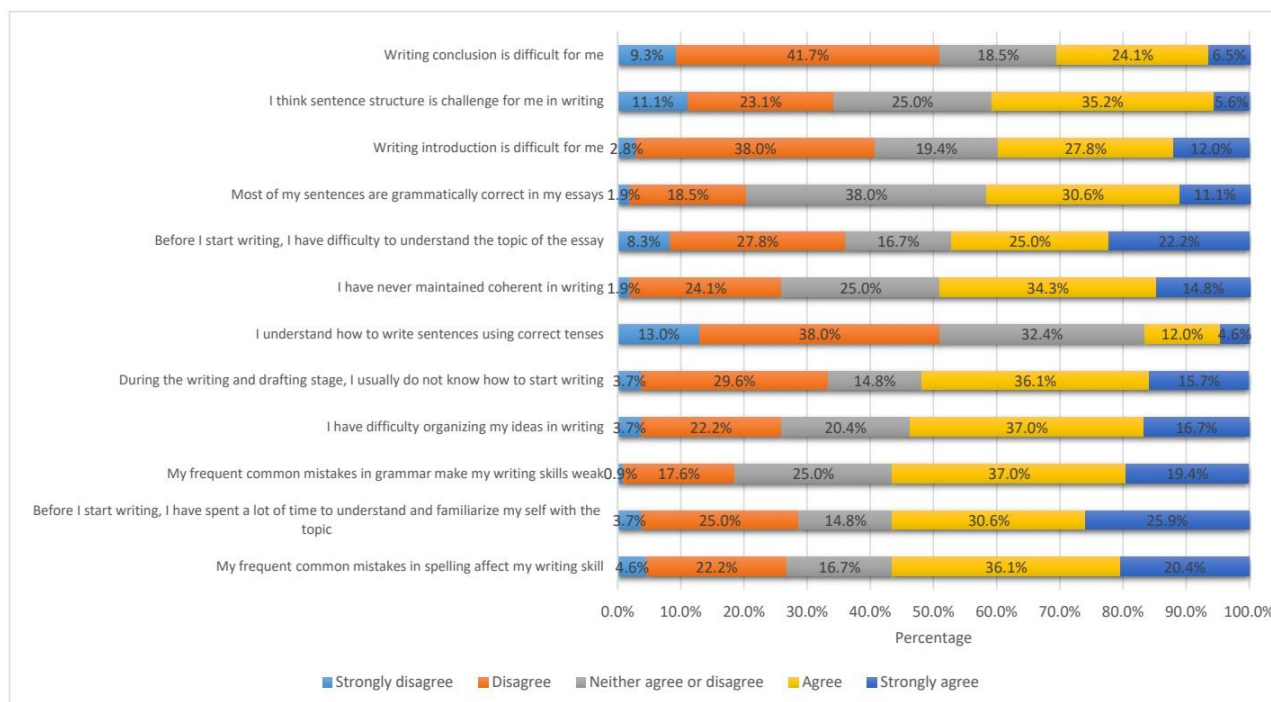
Figure 1 Percentage of Agreement Regarding the Difficulties Encountered by ESL Learners

C. Weaknesses or/and Difficulties Faced While Writing Assignments

In general, 64.8% of the participants reported that they find English assignments easy to some degree. When the participants were asked about their weaknesses or/and the difficulties they face while writing assignments, the most three commonly reported weaknesses or difficulties were coherence and cohesion, language use and finding relevant references, with 46.3%, 38.9% and 37.0%, respectively. For further details on the weaknesses or/and difficulties faced while writing assignments, refer to Table 2.

TABLE 2
WEAKNESSES OR/AND DIFFICULTIES FACED WHILE WRITING ASSIGNMENTS

Weaknesses/Difficulties	Frequency	Percentage
Coherence and cohesion	50	46.3%
Language use	42	38.9%
Finding relevant references	40	37.0%
Organising and connecting ideas	38	35.2%
Expressing own voice	33	30.6%
Writing supporting details	31	28.7%
Choosing a significant topic	27	25.0%
Writing a topic sentence	27	25.0%
Referencing and citation	23	21.3%
Writing electronically	13	12.0%

D. General Attitudes towards English Writing

The mean attitude score for the study participants was found to be 55.9 (SD: 7.6) out of 75, representing 74.5% of the total maximum obtainable score, which reflects a mildly to moderately positive attitude towards writing in English. A total of 15 items were used to explore the participants' general attitudes towards writing in English. According to the participants, the three most commonly agreed upon attitude statements were that the teachers' motivational words are always helpful for them (94.5%), that writing in English is important for their success in their careers (89.9%) and that the teacher's behaviour and personality affect their writing (83.4%) (for more details, see Figure 2).
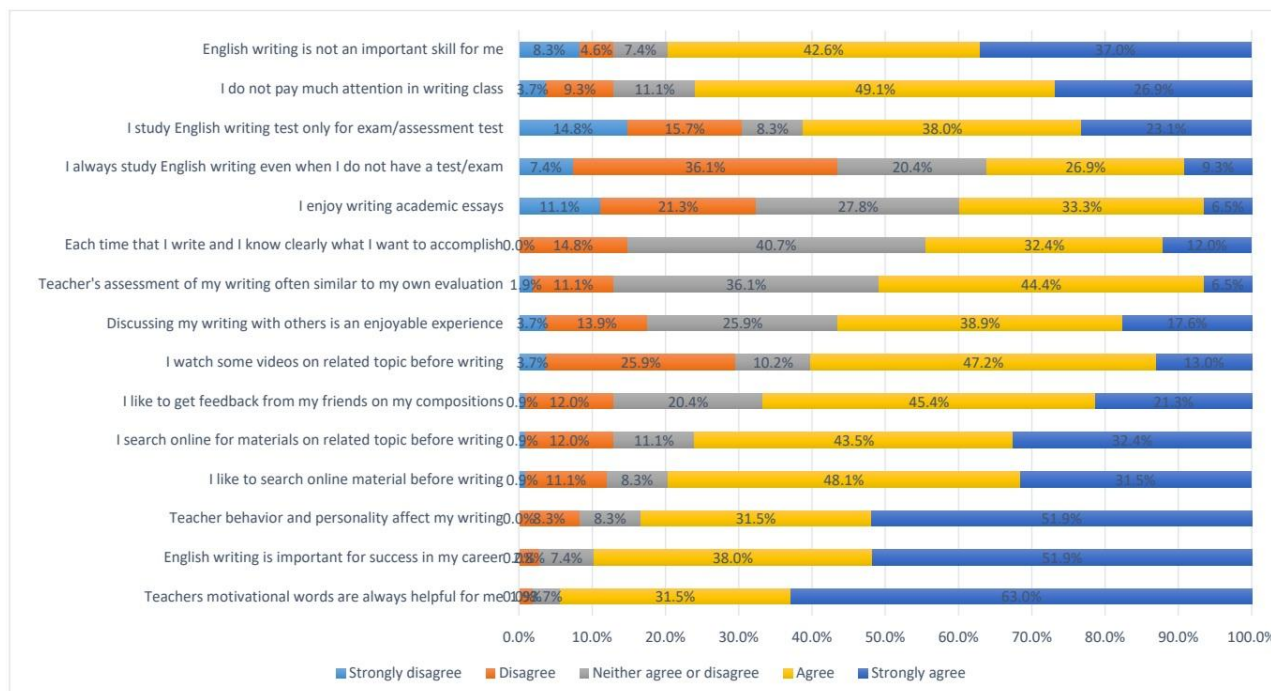
Figure 2 Percentage of Agreement Regarding the General Attitude Towards Writing in English

E. Difficulties Encountered by L2 Learners and the General Attitude towards Writing in English

Pearson's correlation coefficient was used to explore the correlation between the difficulties encountered by L2 learners and the general attitude towards writing in English. The coefficient measure was found to be −0.376 ($p \leq$ 0.001), which reflects a medium negative correlation between the positive attitude score and the difficulty score. In other words, the more the difficulties encountered by an L2 learner, the less likely they are to have a positive attitude towards writing in English.

F. Participants' Characteristics, the Difficulties Encountered by L2 Learners and the General Attitude towards Writing in English

The difficulties encountered by L2 learners, represented by the difficulty score, were found to significantly differ depending on the level of English proficiency of the study participants and their study tracks ($p \leq 0.01$). However, no statistically significant difference was found in the attitude towards writing in English (represented by the attitude score) between participants from different demographic groups (for more details, see Table 3).

TABLE 3
PARTICIPANTS' CHARACTERISTICS, THE DIFFICULTIES ENCOUNTERED BY ESL LEARNERS AND THE GENERAL ATTITUDE TOWARDS WRITING IN ENGLISH

Demographic Variable	Difficulty Score	*p*-value	Attitude Score	*p*-value
Age category				
Below 18 years	42.0 (7.9)		57.3 (6.2)	
18–24 years	38.4 (6.3)	0.085	55.7 (7.6)	0.656
25–34 years	37.2 (11.2)		59.8 (10.9)	
35–44 years	49.5 (2.1)		51.5 (3.5)	
Level of English proficiency				
101	43.4 (5.8)		54.8 (9.7)	
102	40.1 (7.4)		59.0 (6.2)	
103	38.0 (6.3)	0.004**	55.2 (7.2)	0.324
104	35.2 (7.3)		62.4 (10.1)	
Pre-intermediate	27.5 (6.4)		58.0 (4.2)	
Study track				
ELIS	36.1 (5.4)		56.6 (6.8)	
ELCA	41.7 (7.5)	0.004**	58.4 (6.4)	0.214
ELIA	39.6 (6.6)		53.7 (8.7)	
Year of study				
Preparatory year	38.4 (6.8)		55.8 (7.7)	
Second year	39.5 (5.6)	0.539	56.5 (9.4)	0.988
Fourth year	42.7 (11.1)		56.3 (6.5)	

V. DISCUSSION

Writing has always been perceived as the most troublesome and challenging skill for most L2 students. Over the last decade, there has been an increase in research on L2 students' academic writing in universities and colleges. This increase was prompted by the belief that L2 learners have poor academic writing skills. This quantitative study was designed to investigate the L2 academic writing challenges those Saudi students face and their attitudes towards English writing assignments in general. Analysis of students' responses showed that students face many challenges while composing academic texts in English. The study also focussed on students' attitudes towards writing assignments in English.

The first research question in this study sought to determine Saudi students' attitudes towards L2 academic writing assignments in general. The findings revealed mildly to moderately positive attitudes towards writing in English (74.5%). One of the three most commonly agreed upon attitude statements was that the motivational and encouraging words of English language instructors are always supporting and helpful for L2 students. The participants also indicated that writing in English is important for their success in their careers. This proves that they are aware of the importance of mastering English, particularly with regard to their writing skills. They further indicated that the teacher's behaviour and personality in the classroom affect their writing performance. This proves that they need to be encouraged, motivated and interested to improve their writing abilities. Only a very few of the participants reported that they enjoy writing academic assignments in English and that their teachers' assessments of their writing are often different from their own evaluation. Many of the participants also indicated that they only study English writing for their exams and to achieve high grades. A possible explanation for these results may be the students' negative attitudes towards English academic writing resulting from their poor writing abilities and the difficulties that they experience while writing their assignments.

Regarding the second research question, a mild-to-moderate level of difficulty was found to be encountered by ESL learners (64.3%). According to the participants, the most commonly agreed upon difficulty was frequently making common spelling mistakes that affect their writing skills. Similar to the results obtained by Setyowati and Sukmawan (2018), the participants in the current study reported that spending too much time to understand and familiarise themselves with the topic at hand before they start writing and frequently making common grammar mistakes negatively affect their writing skills. They also stated that using English terms, for example, to form correct sentences, and finding the appropriate vocabulary are sources of difficulty in their academic writing. These findings are in line with the results obtained by Ahmed (2019), Alharbi (2019), Cennetkuşu (2017), Heo and Sim (2015) and Sari et al. (2020), showing that low English proficiency is the most significant obstacle that negatively affects L2 students' academic writing. The results obtained in this study also show that one of the three most commonly reported weaknesses or difficulties in academic writing is forming a whole unit of text and making information in text flow smoothly. This finding was also reported by Al-Badi (2015), Mahmood (2020) and RahmtAllah (2020), who found that coherence and cohesion are considered difficult by L2 learners to be applied in academic writing. The participants also reported that searching for information and selecting relevant references are challenging strategies of academic writing. In contrast, they stated that writing electronically is overall the easiest strategy. They also referred to citing information and writing topic sentences as not problematic in academic writing. These results are, however, contrary to previous studies (Alharbi, 2019; Miller & Pessoa, 2016), who found that writing topic sentences is challenging for L2 writers. A possible explanation for such a disparity in the results may be the different student contexts and previous L2 language education and experiences.

The third question in this study was whether there is a significant correlation between students' writing attitudes and writing challenges. The results revealed a medium negative correlation between the positive attitude score and the difficulty score, which means that the more the difficulties encountered by an ESL learner, the less likely they are to have a positive attitude towards writing in English. These results confirm the association between learners' attitudes towards writing in English and their actual academic writing performance. This finding was also reported by other researchers (Akhtar et al., 2020; Ansarimoghaddam & Tan, 2014; Mishra & Pani, 2021; Mulyono et al., 2020; Setyowati, 2017), who argued that students' attitudes have a direct effect on their performance.

The fourth research question was whether there are differences in students' attitudes and the perceived challenges among students from three English-taught tracks: general (ELIA), science (ELIS) and humanities (ELCA). The results showed that the difficulties encountered by L2 learners, represented by the difficulty score, significantly differ depending on their level of English proficiency and their study tracks. In other words, the ELCA group was found to comprise the largest number of students who experience challenges while writing in English, whereas the ELIS group comprised the smallest number. Moreover, the results indicated that with the students reaching higher levels of language proficiency, their L2 academic writing challenges decrease. Alternatively, students from different demographic groups were found to exhibit no differences in their attitudes towards writing in English. In other words, participants from the ELIS, ELCA and ELIS groups and participants from all language levels (101, 102, 103 and 104) were found to share similar attitudes towards writing assignments in English. A possible explanation for these results may be related to the students' previous experiences in learning L2 academic writing. According to Kroll (1994) and Hedge (2014), learners' knowledge and experiences of receiving writing instructions in the classroom as well as interacting with teachers are factors that affect their attitudes and performance.

VI. IMPLICATIONS

Given the above findings, this study provides useful recommendations for L2 students and teachers. First, the results obtained in this study can help English instructors focussing on academic writing skills in Saudi universities become familiar with students' weaknesses and strengths in terms of their L2 academic writing skills. The results also shed light on how Saudi learners perceive English academic writing. These results can guide curriculum and course designers to select appropriate materials and teaching methods that can help learners overcome their writing challenges. They can also encourage teachers to prepare a curriculum based on their students' choices and interests to motivate them to write in English. Teachers can also use visual materials to engage their students in interesting topics and encourage them to write about such topics. By doing this, teachers can enhance their students' schemata and enrich their background knowledge, which can overall improve their attitudes towards writing in English. Furthermore, teachers should design teaching materials with more activities and tasks that focus on writing strategies, such as coherence, cohesion, unity, searching for information, paraphrasing and summarising. For English students, this research can also make them aware of their writing challenges and consequently help them overcome such challenges. Thus, this research can motivate students to improve their writing skills, as it informs and makes them aware of their weaknesses and strengths in academic writing.

VII. LIMITATIONS

This research has some limitations. First, the study mostly resulted in descriptive data, in which generalisations about the findings cannot be made. The current research also did not provide information regarding the relationship between students' attitudes towards writing and their actual writing performance and achievements. Thus, qualitative methods, such as interviews, focus groups, think-aloud protocols and student-written texts, are required to collect more in-depth data about the L2 writing challenges that students face. This can help provide deep insights into the different external and internal factors causing difficulties in L2 academic writing. Moreover, the current study focussed only on a specific group of students and did not investigate the L2 academic writing attitudes and challenges of students of different genders, ages and disciplines and from different language institutions.

VIII. RECOMMENDATIONS FOR FURTHER RESEARCH

Given the findings obtained in the current study, there are many recommendations and suggestions for further research. First, there is a need for action research to investigate the writing skills among Saudi L2 learners. In this regard, teachers and/or researchers may cooperate and investigate the relationship between students' attitudes towards L2 writing and their actual L2 writing performance. By doing so, they can design a curriculum and modify it according to research results. It is also recommended to perform research on different students from different disciplines, ages and genders as well as from various language institutions and universities. This may result in fruitful and plausible findings. Finally, it is recommended to further study the writing difficulties related to the influence of students' first language (Arabic) on their L2 academic writing assignments, as this can help reveal some of the reasons underlying the L2 writing challenges.

APPENDIX A. QUESTIONNAIRE

Q1 - Your Email Address
عنوانك البريدي (الايميل)
Q2 - Age
العمر

- ◉ Under 18
- ○ 18-24
- ○ 25-34
- ○ 35-44
- ○ 45-54
- ○ 55-64
- ○ 65+

Q3 - Describe your level of English language?
ماهو مستواكي في اللغة الانجليزية؟

- ○ 101
- ○ 102
- ○ 103

○ 104

○ Pre-intermediate

○ Upper-intermediate

○ Advanced

Other (please specify)▯

What is your Track? **ماهو مسارك؟**

○ General English Track (ELIA) **سار اللغة الإنجليزية العامة**

○ Academic English Track (ELIS) **مسار اللغة الإنجليزيّة الأكاديمية**

○ English Majors Track (ELIE) **مسار تخصّص اللغة الإنجليزية**

○ Geo-Sciences Track (ELIG) **مسار اللغة الإنجليزية للعلوم البيئية**

○ Faculty of Arts and Humanities Track (ELCA) **مسار اللغة الإنجليزية لكليّة الأداب والعلوم الإنسانية**

○ Health Sciences Track (ELIH) **المسار الصحي**

○ Communication and Media Track (ELIC) **مسار الاتصال والإعلام**

Q4 - What is your major?

ماهو تخصصك الجامعي؟

Q5 - Year of Study

ماهي مرحلتك الدراسية؟

○ Preparatory year **السنة التحضيرية**

○ Second year **السنة الثانية**

○ Third year **السنة الثالثة**

○ Fourth year **السنة الرابعة**

Other (please specify)▯

Difficulties Encountered by ESL learners

الصعوبات التي تواجه الطالب أثناء الكتابة الانشائية باللغة الإنجليزية

Q1 - I understand how to write sentences using correct tenses

أنا متمكنة من كتابة جمل صحيحة من حيث الزمن مثل المضارع البسيط والمضارع التام

Q2 - I think sentence structure is challenge for me in writing.

أعتقد كتابة وتكوين جملة صحيحة باللغة الانجليزية صعب

Q3 - Most of my sentences are grammatically correct in my essays.

معظم الجمل الانجليزية في كتاباتي صحيحة نحوياً

Q4 - During the writing and drafting stage, I usually do not know how to start writing.

عندما أبدأ كتابة القطعة الانشائية لا أعرف بماذا أبدأ او كيف أبدأ

Q5 - Writing introduction is difficult for me.

كتابة المقدمة في القطعة الانشائية صعبة

Q6 - Writing conclusion is difficult for me.

كتابة الخاتمة في القطعة الانشائية صعبة

Q7 - My frequent common mistakes in grammar make my writing skills weak.

الأخطاء المتكررة عندي في قواعد الجمل الانجليزية تجعل من كتاباتي ضعيفة

Q8 - My frequent common mistakes in spelling affect my writing skill.

الأخطاء المتكررة عندي في كتابة هجاء الكلمات تؤثر على مستوى كتاباتي

Q9 - Before I start writing, I have difficulty to understand the topic of the essay.

قبل البدأ في الكتابة, اواجه صعوبة في فهم محتوي السؤال

Q10 - Before I start writing, I have spent a lot of time to understand and familiarize myself with the topic.

قبل البدأ في الكتابة, اقضي وقت طويل احاول ان افهم واستوعب موضوع الكتابة المطلوب

Q11 - I have difficulty organizing my ideas in writing.

أواجه صعوبه في ترتيب افكاري اثناء الكتابة

Q12 - I have never maintained coherent in writing.

لا اعرف كيف احافظ على ترابط وترتيب الافكار في كتابة القطع الانشائية

Q13 - Put a tick next to the weaknesses or/and difficulties you have faced when writing your assignments.

أختاري ممايلي الصعوبات التي تواجهك اثناء الكتابة الانشائية باللغة الانجليزية

☐ paraphrasing **اعادة كتابة المعلومات**

☐ language use استخدام اللغة الانجليزية

☐ expressing own voice التعبير عن رأيي

☐ finding a relevant references أيجاد المعلومات المناسبة

☐ referencing & citation أستخدام المصادر وتنسيقها في الكتابة

☐ coherence & cohesion ربط الأفكار ببعضها وتنسيقها

☐ choosing a significant topic ايجاد موضوع مناسب للكتابة

☐ writing a topic sentence كتابة الافكار الرئيسية

☐ writing supporting details كتابة المعلومات المدعمة للفكرة الرئيسية

☐ writing electronically الكتابة الكترونيا

☐ organize and connect my ideas تنسيق الافكار وربطها

☐ others (specify)

Q14 - In general, you find writing assignment in English
بصفة عامة أجد واجبات الكتابة باللغة الانجليزية

○ Very easy جدا سهله

○ easy سهله

○ Neither easy nor difficult غير متأكدة

○ Difficult صعبه

○ Very difficult جدا صعبه

Q15 - Do you find writing assignments in English difficult? Why or why not?
هل تجدي الكتابة باللغة الأنجليزية صعبة أم سهلة؟ ولماذا؟

Q16 - What are the main weaknesses you have faced when writing your assignments?
ماهي نقاط ضعفك أثناء الكتابة الانشائية باللغة الانجليزية؟

General Attitude Towards English Writing
الموقف العام اتجاه كتابة القطع الانشائية باللغة الإنجليزية

Q1 - English writing is not an important skill for me.
اعتبر الكتابة باللغة الانجليزية مهارة غير مهمة

Q2 - I do not pay much attention in writing class.
أنا لا أهتم كثيرًا بمادة الكتابة باللغة الانجليزية

Q3 - I study English writing test only for exam/assessment test.
أذاكر مادة الكتابة الانجليزية فقط لغرض النجاح في الاختبار

Q4 - I always study English writing even when I do not have a test/exam.
اذاكر مادة الكتابة الانجليزية حتى عندما لايكون هناك اختبارات

Q5 - I enjoy writing academic essays.
أنا استمتع بكتابة المواضيع الانشائية وواجبات الكتابة باللغة الأنجليزية

Q6 - I like to search online material before writing.
أبحث عن المعلومات الكترونيا قبل البدأ في الكاتبة

Q7 - Each time that I write, and I know clearly what I want to accomplish.
في كل مرة أكتب فيها قطعة انشائية أعرف بوضوح ما أريد تحقيقه

Q8 - I watch some videos on related topic before writing.
أشاهد بعض مقاطع الفيديو حول موضوع ذي صله بالموضوع الانشائي قبل البدأ في الكتابة

Q9 - I like to get feedback from my friends on my compositions.
أحب الحصول على تقييم (تغذية رجعية) من الاخرين (الاصدقاء و المعلم) حول كتاباتي باللغة الانجليزية

Q10 - I search online for materials on related topic before writing.
أنا أبحث في الإنترنت عن معلومات ذي صلة بالموضوع الانشائي قبل البدأ في الكتابة

Q11 - English writing is important for success in my career.
القدرة على الكتابة باللغة الانجليزية مهمة في نجاح حياتي العلمية والعملية

Q12 - Discussing my writing with others is an enjoyable experience.
مناقشة كتاباتي الانشائية مع الآخرين هي تجربة ممتعة

Q13 - Teacher's assessment of my writing often similar to my own evaluation.
غالبًا ما يكون تقييم المعلم لكتاباتي مشابهًا لتقييمي الخاص

Q14 - Teachers motivational words are always helpful for me.
الكلمات التحفيزية من المعلمين مفيدة دائمًا بالنسبة لي

Q15 - Teacher behavior and personality affect my writing.

يؤثر سلوك المعلم وشخصيته عل كتاباتي الانشائية

This is the end of the questionnaire. هذه نهاية الاستبيان

Thank you for filling out this survey. شكرا لملئ هذا الاستطلاع

REFERENCES

[1] Agesty, E., Inderawati, R., & Eryansyah. (2021). Writing Attitude and Emotional Intelligence as Determinants in Boosting EFL Learners' Writing Performance. *English review: Journal of English Education*, *10*(1), 245–254.

[2] Ahmed, P. H. (2019). Major Writing Challenges Experienced by EFL Learners in Soran University. *Journal of University of Human Development*, *5*(3), 120. Retrieved January 12, 2022, from https://doi.org/10.21928/juhd.v5n3y2019.pp120-126

[3] Akhtar, R., Hassan, H., & Saidalvi, A. (2020). The Effects of ESL Student's Attitude on Academic Writing Apprehensions and Academic Writing Challenges. *International Journal of Psychosocial Rehabilitation*, *24*(5), 5404–5412. Retrieved January 10, 2022, from https://doi.org/10.37200/ijpr/v24i5/pr2020247

[4] Al-Badi, I. A. H. (2015). Academic Writing Difficulties of ESL Learners Ibtisam. *WEI International Academic Conference Proceedings*, 63–76. Retrieved January 10, 2022, from http://www.westeastinstitute.com/wp-content/uploads/2015/02/Ibtisam-Ali-Hassan-Al-Badi-full-Paper.pdf

[5] Alharbi, M. A. (2019). EFL university students' voice on challenges and solution in learning academic writing. *Indonesian Journal of Applied Linguistics*, *8*(3), 576–587. Retrieved January 12, 2022, from https://doi.org/10.17509/ijal.v8i3.15276

[6] Altınmakas, D., & Bayyurt, Y. (2019). An exploratory study on factors influencing undergraduate students' academic writing practices in Turkey. *Journal of English for Academic Purposes*, *37*, 88–103. Retrieved January 10, 2022, from https://doi.org/10.1016/j.jeap.2018.11.006

[7] Anderson, C. E., & Cuesta-Medina, L. (2019). Beliefs and practices concerning academic writing among postgraduate language-teacher trainees. *Ikala*, *24*(1), 29–49. Retrieved February 2, 2022, from https://doi.org/10.17533/UDEA.IKALA.V24N01A01

[8] Ansarimoghaddam, S., & Tan, B. H. (2014). Undergraduates' experiences and attitudes of writing in L1 and English. *GEMA Online Journal of Language Studies*, *14*(1), 7–28. Retrieved January 22, 2022, from https://doi.org/10.17576/gema-2014-1401-02

[9] Bartram, B. (2010). *Attitudes to Modern Foreign Language Learning: Insights from Comparative Education* (1st Edition). Library of Congress Cataloging-in-Publication Data.

[10] Cai, L. J. (2013). Students' Perceptions of Academic Writing: A Needs Analysis of EAP in China. *Language Education in Asia*, *4*(1), 5–22. Retrieved February 25, 2022, from https://doi.org/10.5746/leia/13/v4/i1/a2/cai

[11] Cennetkuşu, N. G. (2017). International students'' challenges in academic writing: A case study from a prominent U.S. university. *Journal of Language and Linguistic Studies*, *13*(2), 309–323.

[12] Chambers, G. (1999). *Motivating Language Learners: Modern Languages in Practice* (1st Edition). Library of Congress Cataloging-in-Publication Data.

[13] Daly, J., & Miller, M. (1975). The Empirical Development of an Instrument to Measure Writing Apprehension. *Research in the Teaching of English*, *9*(3), 242–249.

[14] Elsherif, E. (2012). *L2 Academic Writing Difficulties and Tutors' Written Feedback* (1st Eiditi). LAP LAMBERT Academic Publishing.

[15] Garrett, P. (2010). *Attitude to Language: Key Topics in Sociolinguistics* (1st Edition). Cambridge University Press.

[16] Gillett, A., Hammond, A., & Martala, M. (2009). *Successful Academic Writing* (1st Edition). British Library Cataloging in Publication Data.

[17] Graham, S. (2019). Changing How Writing Is Taught. *Review of Research in Education*, *43*(1), 277–303. Retrieved February 25, 2022, from https://doi.org/10.3102/0091732X18821125

[18] Hammad, E. A. (2016). Palestinian University Students' Problems with EFL Essay Writing in an Instructional Setting. *Teaching EFL Writing in the 21st Century Arab World: Realities and Challenges*, 99–124. Retrieved January 26, 2022, from https://doi.org/10.1057/978-1-137-46726-3_5

[19] Hashemian, M., & Heidari, A. (2013). The Relationship between L2 Learners' Motivation/Attitude and Success in L2 Writing. *Procedia - Social and Behavioral Sciences*, *70*, 476–489. Retrieved January 11, 2022, from https://doi.org/10.1016/j.sbspro.2013.01.085

[20] Hedge, T. (2014). *Teaching and Learning in Language Classroom* (2nd Edition). Oxford University Press.

[21] Heo, J.-Y., & Sim, J.-Y. (2015). Korean students' perspectives on L2 writing difficulty, needs, and challenges. *Studies in English Education*, *20*(2), 161–188. Retrieved March 2, 2022, from http://www.dbpia.co.kr/Journal/ArticleDetail/NODE06384113

[22] Hinkel, E. (2020). Teaching academic ESL writing: Practical techniques in vocabulary and grammar. In *Teaching Academic L2 Writing: Practical Techniques in Vocabulary and Grammar* (2nd Edition). Routledge Taylor & Francis. Retrieved February 23, 2022, from https://doi.org/10.4324/9780429437946

[23] Hyland, K. (2003). *Second Language Writing* (1st Edition). Cambridge University Press.

[24] Hyland, K., & Hyland, F. (2006). *Feedback in Second Language Writing: Contexts and Issues*. Cambridge University Press.

[25] Islam, C. (2017). Strategy Instruction in the Teaching of Writing: Preserves Teachers' Self-Perception of Their Writing and Their Practice of Teaching Writing. *International Journal of Language and Linguistics*, *4*(3), 1–11. Retrieved January 23, 2022, from www.ijllnet.com

[26] Jabali, O. (2018). Students' attitudes towards EFL university writing: A case study at An-Najah National University, Palestine. *Heliyon*, *4*(11), e00896. Retrieved February 22, 2022, from https://doi.org/10.1016/j.heliyon.2018.e00896

[27] Kroll, B. (1994). *Second Language Writing Research insights for the classroom* (4th Edition). Cambridge University Press.

[28] Kroll, B. (2008). *Exploring the Dynamics of Second Language Writing (Cambridge Applied Linguistics)* (3rd Edition).

Cambridge University Press.

[29] Mahmood, K. (2020). Academic writing challenges of EFL learners and teachers ' proficiency in Pakistani higher education. *Journal of Research in Social Sciences*, 8(2), 56–76.

[30] Manchon, R. (2009). *Writing in Foreign Language Contexts: Learning, Teaching, and Research* (1st Edition). Library of Congress Cataloging-in-Publication Data.

[31] Manchon, R., & Matsuda, P. (2016). *Handbook of Second and Foreign Language Writing* (1st Edition). Library of Congress Cataloging-in-Publication Data.

[32] Mazgutova, D., & Hanks, J. (2021). L2 Learners' Perceptions of Their Writing Strategies on an Intensive EAP Course. *Journal of Academic Writing*, 11(1), 45–61. Retrieved January 3, 2022, from https://doi.org/10.18552/joaw.v11i1.566

[33] Michel, M., Révész, A., Lu, X., Kourtali, N. E., Lee, M., & Borges, L. (2020). Investigating L2 writing processes across independent and integrated tasks: A mixed-methods study. *Second Language Research*, 36(3), 307–334. Retrieved January 23, 2022, from https://doi.org/10.1177/0267658320915501

[34] Miller, R. T., & Pessoa, S. (2016). Where's Your Thesis Statement and What Happened to Your Topic Sentences? Identifying Organizational Challenges in Undergraduate Student Argumentative Writing. *TESOL Journal*, 7(4), 847–873. Retrieved February 7, 2022, from https://doi.org/10.1002/tesj.248

[35] Mishra, M., & Pani, P. (2021). *Exploring Correlations among Attitude, Self-Efficacy and English Language Achievement* (1st Edition). BlueRose Publishers.

[36] Mulyono, H., Liestyana, A. R., Warni, S., Suryoputro, G., & Ningsih, S. K. (2020). Indonesian Students' Anxiety To Write in English As a Foreign Language Across Gender and Educational Levels. *Problems of Education in the 21st Century*, 78(2), 249–262. Retrieved March 5, 2022, from https://doi.org/10.33225/pec/20.78.249

[37] Qasem, F., Ali, F., Qasem, A., Zayid, I. M., & Journal, E. (2019). The Challenges and Problems Faced by Students in the Early Stage of Writing Research Projects in L2, University of Bisha, Saudi Arabia European Journal of Special Education Research the challenges and problems faced by students in the early stage of writing. *Of Special Education Research*, 4(1), 33. Retrieved February 9, 2022, from https://doi.org/10.5281/zenodo.2557036

[38] Rahmatunisa, W. (2014). Problems Faced By Indonesian EFL Learners in Writing Argumentative Essay. *English Review: Journal of English Education*, 3(1), 1–9. Retrieved February 15, 2022, from http://journal.uniku.ac.id/index.php/ERJEE

[39] RahmtAllah, E. A. E. (2020). EFL Students' Coherence Skill in Writing: A Case Study of Third Year Students of Bachelors in English Language. *English Language Teaching*, 13(8), 120. Retrieved February 7, 2022, from https://doi.org/10.5539/elt.v13n8p120

[40] Sari, I., Pulungan, A. H., & Husein, R. (2020). Students' Cognition and Attitude in Writing Descriptive Text. *Britain International of Linguistics Arts and Education (BIoLAE) Journal*, 2(1), 395–404. Retrieved February 7, 2022, from https://doi.org/10.33258/biolae.v2i1.210

[41] Schneider, D. (2009). Fusing Two Philosophies to Promote Creativity, Higher-Order Thinking, and Organization in the Writing Process. *Language Arts Journal of Michigan*, 24(2). Retrieved February 9, 2022, from https://doi.org/10.9707/2168-149x.1057

[42] Setyowati, L. (2017). The Eight Graders Writing Attitude toward EFL Writing in Indonesian Context. *International Journal of Languages' Education*, 1(Volume 5 Issue 3), 422–433. Retrieved January 26, 2022, from https://doi.org/10.18298/ijlet.2034

[43] Setyowati, L., & Sukmawan, S. (2018). EFL_ Indonesian Students' Attitude toward Writing in English. *Arab World English Journal*, 7(4), 365–378.

[44] Shakib Kotamjani, S., & Hussin, H. (2017). Perceptions of Challenges in Writing Academically: Iranian Postgraduate Students' Perspectives. *International Journal of Applied Linguistics and English Literature*, 6(4), 1. Retrieved February 9, 2022, from https://doi.org/10.7575/aiac.ijalel.v.6n.4p.1

[45] Tribble, C. (1996). *Language Teaching: A scheme for Teacher Education: Writing* (1st Edition). Oxford University Press.

[46] Tsao, J. J., Tseng, W. T., Hsiao, T. Y., Wang, C., & Gao, A. X. (2021). Toward a Motivation-Regulated Learner Engagement WCF Model of L2 Writing Performance. *SAGE Open*, 11(2). Retrieved February 9, 2022, from https://doi.org/10.1177/21582440211023172

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[1] Book Translated (2021)- Troike, Muriel Saville, Introducing Second Language Acquisition. (2006) Cambridge University Press. Cambridge, UK.

[2] Khadawardi. H. (2020) Transfer of print-based academic reading strategies to on-screen reading. International Journal of English Language Education. Vol.9, No.1 (pp.60-105). Retrieved from https://doi.org/10.5296/ijele.v9i1.18091

[3] Khadawardi. H. (2021). The Effect of Implicit Corrective Feedback on English Writing of International Second Language Learners. English Language Teaching; Published by Canadian Center of Science and Education Vol. 14, No. 1 (pp.123-139). Retrieved from http://www.ccsenet.org/journal/index.php/elt/article/view/0/44477

A Correlative Study on English Listening Beliefs and Strategies of Chinese High School Students—A Case in Fujian Province

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Abstract—This study investigates the correlation between language learning beliefs and strategies in terms of listening comprehension. Data were collected from 94 tenth graders in a Chinese high school in Fujian Province through questionnaires and in-depth interviews. The findings show a significant and positive correlation between English listening beliefs and strategies, which influence each other to varying degrees. Specifically, the participants were reported to hold various beliefs on English listening while employing a range of strategies for listening comprehension, though the frequency of their overall strategy use was at the medium level. Furthermore, cognitive strategies were found to be the most frequently used ones, followed by socio-affective strategies and metacognitive strategies. Based on the research findings, this article suggests that high school English teachers should help learners foster positive beliefs which normally lead to effective use of learning strategies; meanwhile, learners are advised to keep aware of what beliefs they hold, what strategies they use most or least, and what alternative strategies they can select so as to enhance their metacognition level and improve their listening comprehension.

Index Terms—learning beliefs, learning strategies, listening comprehension, high school students

I. INTRODUCTION

In recent years, interest in EFL teaching has shifted to student's learning because learners are considered as active participants and play important parts in the process of language learning. Consequently, lots of studies in the field of EFL/ ESL learning investigate issues relevant to learners and individual differences (ID), including age, motivation, language aptitude, anxiety, personality, intelligence, learning style, etc.

As two important ID factors in L2/FL learning, learner beliefs and learning strategies have gained much attention of researchers from home and abroad. By investigating the relationship between the two variables, it is recognized that learners' preconceived beliefs about conscious and unconscious language learning affect the way they choose strategies, and some beliefs are likely to restrict learners' range and flexibility of strategy use (Horwitz, 1988; Wen & Wang, 1996a; Yang, 1999; Mokhtaria, 2007, as cited in Hassan, 2015).

However, given the importance of L2 listening comprehension (LC), particularly in EFL contexts, it is surprising to find little research has investigated the relationship between learning beliefs and strategies in terms of L2 listening. According to Vandergrift (1999), listening comprehension plays a key role in facilitating language learning, so it is necessary to address how students listen and what beliefs they hold towards listening comprehension, as learners are likely to have certain beliefs about listening, which may influence the way in which they approach and modulate the efficacy of strategy utilization (Graham, 2006; Cross, 2009). In today's China, under the great pressure of Gaokao (the National College Entrance Examination), high school students are working under huge stress and are facing incredibly tough competition. Particularly, after a listening section has been added in the English test for Gaokao, most high school students find it a greater challenge to excel in the listening part. Generally speaking, after at least six years of English learning at school, Chinese high school students have formed some sort of beliefs towards and preference of strategy use about EFL. Therefore, it is of significance for us to explore high school students' listening beliefs, the corresponding strategies they employ in the process of listening, and the correlation between these two variables. Hopefully, these research findings will shed some light on facilitating teachers' future instruction in terms of listening comprehension through better understanding students' listening problems and taking appropriate and tailored measures. It is also expected that, by receiving correct and effective guidance and tuition from teachers, students will do better in enhancing their English listening competence and improving their performance in English exams as well.

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II. LITERATURE REVIEW

A. Learner Beliefs about Language Learning

Learner beliefs about language learning are preconceived notions or misconceptions about learning a second/ foreign language (Horwitz, 1988). According to the *Dictionary of Applied Linguistics* (2002, as cited in Kamberi, 2013), learner beliefs include learners' ideas about different aspects of language, language learning and language teaching, which may have an effect on their learning strategies and learning outcomes. In this study, we define learner beliefs about EFL listening as "students' perceived notions or ideas about EFL listening and the learning strategies for listening comprehension."

In order to assess student beliefs, Horwitz (1988) developed an instrument known as Beliefs about Language Learning Inventory (BALLI), which encompasses five major dimensions: beliefs about difficulty of language learning, foreign language aptitude, the nature of language learning, learning and communication strategies, and learner motivations and expectations. Later, Nix and Tseng's (2014) designed an inventory called Beliefs on EFL Listening Abilities (BELLA) to investigate listening beliefs, which consists of strategy-related listening beliefs, native-speaker-related listening beliefs, and assessment-related listening beliefs. Hence, in our study, learner beliefs about English listening include three dimensions: general beliefs about listening, strategy-related listening beliefs, and individual-difference-related listening beliefs.

So far, studies into beliefs about listening have been conducted in different ways. For example, Chiou (2004) compared the English listening beliefs and strategy use of teachers and students from the same university in Taipei, Taiwan; Graham (2006) investigated the perceptions held by English learners regarding listening comprehension in French; Shabani and Heidarian (2015) probed into the effect of metacognitive instruction on Iranian EFL learners' perceptions about listening, and Li (2016) explored beliefs about EFL listening held by high school students.

B. Language Learning Strategies

According to Chamot (1987), learning strategies are techniques, approaches or deliberate actions that students take so as to facilitate the learning, recall of both linguistic and content area information (cited in Macaro, 2008). Cohen (2014) argues that the element of consciousness is what distinguishes strategies from those processes that are not strategic. Hence, learning strategies for listening comprehension in this study are defined as "deliberate actions taken by learners to facilitate listening comprehension and language learning".

Among the various proposed classification systems, the work of Rubin (1981), O'Malley and Chamot (1990) and Oxford (1990) are frequently and widely cited. O'Malley and Chamot (1990) validated a body of learning strategies and proposed a classification scheme grounded in cognitive theory (see Table 1). They argue metacognitive strategies as essential to the development of effective target language skills, orienting their research towards the use of strategies in speaking, listening, and writing. Building on their work, Vandergrift (1997) identified a range of metacognitive and cognitive listening strategies reported by L2 learners thinking aloud while listening to texts in French, offering supporting evidence of the strategies outlined by O'Malley and Chamot. The present study follows O'Malley and Chamot's (1990) strategy classification framework in that it is more widely used in studies related to listening strategies.

TABLE 1
O'MALLEY AND CHAMOT'S (1990) CLASSIFICATION FRAMEWORK

Primary strategies	Metacognitive strategies	Cognitive strategies	Socio-affective strategies
Definitions	Higher order executive skills that may entail planning for, monitoring or evaluating the success of a learning activity	Operate directly on incoming information, manipulating it in ways that enhance learning	Represent a broad grouping that involves either interaction with another person or identical control over affect
Representative secondary strategies	Planning, directed attention, selective attention, self-management, self-monitoring, self-evaluation	Note taking, repetition, grouping, elaboration, inferencing, summarization, transfer	Questioning for classification, cooperation, self-talk and self-reinforcement

Regarding studies of leaning strategies concerning listening, several studies have focused on the effect of strategy instruction on learners' listening comprehension proficiency (Rasouli et al., 2013; Ngo, 2016). Some studies focused on exploring learners' use of listening strategies and its relationship with listening comprehension, the result of which confirmed the positive association between them (Kassem, 2015; Vahdany et al., 2016).

C. Studies on Correlation between Beliefs and Strategy Use

A large number of studies (Wenden 1987; Yang 1999; Park, 1995, as cited in Ellis, 2013) have investigated the relationship between learning beliefs and learning strategies, adding more evidence that learner beliefs are related to strategy choice. However, the results are somewhat mixed as to whether they are positively or negatively related.

Sioson (2011) investigated 300 first year college students in Philippine and found out that language learning

strategies in general were negatively correlated with language learning beliefs, while in the studies of Abedini, Rahimi and Zare-ee (2011) and Azar and Saeidi's (2013), the results revealed a significant positive relationship between participants' beliefs and their use of strategies. Similar findings were also obtained among some Chinese scholars, who have found a positive or negative correlation between these two variables (Wen & Wang, 1996a; Zhang, 2008; Liu, 2010).

Different from the above-mentioned studies that explored the relationship between general language learning beliefs and strategy use, Liu (2011) attempted to examine the correlation between language learning beliefs and strategies in terms of listening comprehension. Findings manifested that all dimensions of beliefs about EFL listening were associated with those of learning strategies except for motivational beliefs. Specifically, learners' strategy-related beliefs were strongly related to the use of strategies.

To sum up, most of the existing studies focused on investigating the relationship between learners' beliefs and strategies about English learning in general, with few studies exploring their relationship from a particular aspect, such as listening, speaking, reading, and writing. Besides, the participants were mainly university students, with only a few studies looking at high school learners' beliefs and strategy use. In addition, much of the research has relied heavily on quantitative methods of data collection and analysis. Undoubtedly, a research which adopts a combination of quantitative and qualitative methods of data collection and analysis is much more scientific, rational and desirable.

III. RESEARCH DESIGN

A. Participants

The participants were 100 tenth graders from a provincial key high school in Fujian. They come from two different classes but are taught by the same English teacher.

B. Research Questions

This study aims to investigate the status quo of high school students' beliefs and strategy use concerning listening comprehension and the relationship between listening beliefs and strategies. To fulfill this purpose, the following questions were explored in this study:

1. What beliefs do high school students hold about EFL listening?
2. What learning strategies do high school students use for listening comprehension?
3. What is the relationship between high school students' learning beliefs and learning strategies in terms of listening comprehension?

C. Instruments

A combination of quantitative and qualitative method was employed in the current study. To be specific, a questionnaire was firstly used to investigate 100 tenth graders in Fujian Province, and then 6 students were randomly selected for a semi-structured interview based on their listening scores from the Mid-term English exam, which had just been held when the study was conducted.

The questionnaire that was adopted by the researchers is called *Questionnaire for Learners' Beliefs and Strategy Use for Listening Comprehension* (QLBSULC). It is composed of three sections (see Table 2) and was mainly adapted from the work of Nix and Tseng's (2014), Zhang et al. (2013), Ji and He (2004), Vandergrift (1999) and Wen and Wang (1996a).

The first section of the questionnaire collects students' personal information, including name, gender, age, and class. In the second section, twenty items and an open-ended question are constructed to investigate students' beliefs about EFL listening across three dimensions. The five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree) is used. The third section investigates students' use of learning strategies for listening comprehension, which is primarily based on O'Malley and Chamot's (1990) classification of learning strategies. Altogether 34 items are put into three categories with a five-point Likert scale ranging from 1 (Never or almost never true of me) to 5 (always or almost always true of me) being used.

By analyzing the data from 44 valid questionnaires in a pilot study, the reliability coefficients of the belief scale and the strategy scale are 0.809 and 0.914 respectively (see Table 3), which indicate that the two scales are reliable.

TABLE 2
QUESTIONNAIRE: QLBSULC

	Dimension	N of Items	Example Items
Belief Scale	General understanding of listening	6	1. Good pronunciation is important for listening comprehension. 5. Understanding the culture of English-speaking countries is important for listening comprehension.
	Strategy-related listening beliefs	6	11. Listening to English materials which interest me (e.g. English songs, English radios) will improve my listening. 12. While listening, guessing the meaning of new words actively will help improve listening comprehension.
	Individual differences-related beliefs	7	17. Good listening comprehension is important for improving my English test scores. 18. I believe that I will ultimately develop good listening skills.
	Open-ended question	1	21. Do you have other opinions or suggestions concerning the listening skills that have not been included above?
Strategy Scale	Metacognitive strategies	13	1. Before doing listening exercises, I will figure out my listening tasks by obtaining relevant information from titles or requirements of the items. 2. Before listening, I am able to get prepared to concentrate on what I am going to hear.
	Cognitive strategies	14	18. While listening, I try to understand each sentence. 22. I can guess the meaning of words or sentences based on the context.
	Socio-affective strategies	7	30. I get impatient when I can't understand the listening content. 31. I always encourage myself to be confident so as to strive for progress in English listening.

TABLE 3
RELIABILITY STATISTICS OF QUESTIONNAIRE

Belief Scale		Strategy Scale	
Cronbach's Alpha	N of Items	Cronbach's Alpha	N of Items
0.809	20	0.914	34

Apart from the questionnaire survey, a semi-structured interview was conducted to gain a deeper understanding of the relationship between students' beliefs and use of strategies for listening comprehension. The interview questions were mainly based on the analysis of participants' questionnaire data, with reference to a list of open questions compiled by Wen (1996, cited by Cheng & Zheng, 2002). Some questions were improvised simultaneously during the process of interview if necessary.

D. Data Collection and Analysis

Data were collected through two stages: in the first stage, 100 copies of questionnaires were distributed to the participants, with 94 copies being considered valid. SPSS 19.0 software was used to analyze the data collected from questionnaire survey. The statistical analysis procedures include 1) descriptive statistics (e.g. frequencies, percentages, means, and standard deviations) which were computed to depict the distribution of learners' beliefs and strategy use for listening comprehension; 2) Pearson correlation, which was conducted to analyze the correlation between learning beliefs and learning strategies in terms of listening comprehension.

In the second stage, the 94 participants were divided into three groups (the high-score group, the medium-score group and the low-score group) according to their listening scores in the mid-term English examination, and two interviewees were chosen respectively from each group (see Table 4). On average, every interviewee was interviewed for 15 minutes and all interviews were audio-taped, transcribed verbatim, and subjected to inductive qualitative data analysis by the researchers.

TABLE 4
BASIC INFORMATION OF INTERVIEWEES

Interviewees	Age	Gender	Listening scores	Group
Student 1	15	Female	24	High-score
Student 2	16	Male	24	
Student 3	16	Female	18	Medium-score
Student 4	15	Female	15	
Student 5	17	Male	10.5	Low-score
Student 6	16	Male	10.5	

IV. FINDINGS AND DISCUSSION

A. Students' Beliefs about EFL Listening

After studying English for six years, most first-year high school students have formed certain beliefs about English listening. In order to discover their beliefs about EFL listening, the descriptive statistics (percentages and means) of the data covered in questionnaires were computed, offering a detailed explanation of those items in this part.

1. General Understanding of Listening

Beliefs in this dimension include 6 items and focus on the fundamental nature and the defining characteristics of EFL listening and listening ability. The results (see Table 5) show that the overall mean value is 3.94, indicating most participants hold positive beliefs. The highest mean value of 4.61 is noted for Belief 1 (Good pronunciation is important for listening comprehension.) while Belief 3 (Understanding the culture of English-speaking countries is important for listening comprehension.) scores the lowest mean value of 3.49. Combining the percentage under "agree" and "strongly agree", 94.7% of students agreed with Belief 1, while only 45.8% of students agreed with Belief 3. This is in agreement with the results of Chiou's (2004) study, which indicated that the majority of students recognized the importance of good pronunciation in comprehending listening texts, but only about half of the students believed it was necessary to know the English-speaking culture. As we know, if students are not familiar with the pronunciation of words or do not master the right pronunciation, they cannot associate the words they hear with the words they have learned correctly, which hinders their process of listening comprehension directly. Meanwhile, if students underestimate the importance of cultural knowledge, they will be inclined to neglect their development of intercultural awareness and competence, thus experience more difficulties when it comes to assimilating listening materials that are embedded with cultural background or knowledge, which may lead to more frustration and discouragement in listening comprehension.

2. Strategy-related Listening Beliefs

Beliefs 7-13 are mainly about learning strategies that students normally use in listening practice. It was discovered that beliefs in this dimension have the lowest mean value of 3.85 (see Table 5), indicating that some students may hold negative beliefs about certain strategies. While Belief 11 (Listening to English materials which interest me will improve my listening.) enjoys the highest mean value of 4.26, Belief 7 (The best way to take down what I hear is to write it down in Chinese.) shows the lowest mean score of 2.98, which implies that respondents are not sure whether this is a good strategy or not. Although there is no consensus on the function of mother tongue-reliance in second language acquisition, it is generally believed that its negative effects outweigh the positive ones (Ji & He, 2004; Wen & Wang, 1996a). As for Belief 11, most participants hold positive belief about it, and this is verified in the interview of this study. For example, Student 3 mentioned: "Students who want to improve listening should practice listening as much as possible. Doing listening exercises is not enough, he should also listen to materials that interest him. Interest is the best teacher."; Student 1 said: "I like watching English movie and TV dramas, and I think my listening gets improved accordingly." Apparently, this is easy to understand. As in the mobile internet era, students can effortlessly gain access to various kinds of listening materials, such as the latest English songs, foreign broadcasts, English talk shows, and these audio sources are more interesting than traditional ways of listening practice, so it is more popular with students.

TABLE 5
DESCRIPTIVE STATISTICS OF BELIEF SCALE

Dimensions of Listening Beliefs	Mean
General understanding of listening	3.94
Strategy-related listening beliefs	3.85
Individual differences-related beliefs	4.20

3. Individual Differences-related Beliefs

Individual Differences-related Beliefs，which are mainly about motivation and aptitude, include 7 items in the questionnaire. The mean value in this dimension being 4.20 (see Table 5) indicates that the participants generally hold positive beliefs about motivation and aptitude. We noticed that Belief 18 (I believe that I will ultimately develop good listening skills.) gets the lowest mean value of 3.75, and this clearly suggests that some students lack confidence in their listening study. In particular, only 61.7% of the participants believe that they will develop good listening skills in future, whereas nearly 40% of them don't think so. This result discovered in the questionnaire survey is further supported in the open-ended question. For instance, someone wrote: "Maybe I am not good at listening."; another one wrote: "I think listening is more difficult than reading. I think it's too hard for me to improve my listening skills."; still another one wrote: "I want to improve my listening, but it is so difficult." In a way, these findings indicate that students' negative beliefs about their language aptitude are probably due to their inability to select appropriate strategies and put them into listening practice. Therefore, they are likely to attribute the difficulties to their self-assumed low aptitude.

B. Students' Use of Learning Strategies for Listening Comprehension

With regard to students' use of learning strategies for listening comprehension, the means and standard deviations obtained from the questionnaire data were computed. In calculating the frequency of strategy use, the researchers followed Oxford's scoring system (see Table 6).

TABLE 6
OXFORD'S FREQUENCY SCALE

Averages	Frequency of strategy use	Frequency level
4.5-5.0	Always or almost always used	High use
3.5-4.4	Usually used	
2.5-3.4	Sometimes used	Medium use
1.5-2.4	Generally not used	Low use
1.0-1.4	Never or almost never used	

1. Overall Strategy Use

From the mean score of 3.27 and a relatively low standard deviation of 0.48 in Table 7, it can be inferred that these strategies are employed only in medium frequency by a majority of participants. The result also displays that no participant reports extremely high or low frequency of strategy use in the study.

TABLE 7
DESCRIPTIVE STATISTICS OF THE OVERALL STRATEGY USE

	Always or almost always used	Usually used	Sometimes used	Generally not used	Never or almost never used	Mean	Std. Deviation
Mean level	4.5-5.0	3.5-4.4	2.5-3.4	1.5-2.4	1.0-1.4	3.27	.47826
Frequency	0	33	58	3	0		
Percent	0%	35.1%	61.7%	3.2%	0%		

Table 8 demonstrates the results of each category. Clearly, the mean value of cognitive strategies is the highest (3.36) followed by that of the socio-affective strategies (3.25), with metacognitive strategies showing the lowest mean score of 3.18. This indicates that cognitive strategies are most frequently used by the participants while metacognitive strategies the least frequently.

TABLE 8
DESCRIPTIVE STATISTICS OF STRATEGY CATEGORIES

Categories	Always or almost always used	Usually used	Sometimes used	Generally not used	Never or almost never used	Mean	Std. Deviation
Mean level / Percent	4.5-5.0	3.5-4.4	2.5-3.4	1.5-2.4	1.0-1.4		
Metacognitive	2.1%	39.4%	45.7%	12.8%	0%	3.18	.61632
Cognitive	0%	39.4%	58.5%	2.1%	0%	3.36	.46887
Socio-affective	1.1%	34.0%	52.1%	11.7%	1.1%	3.25	.63414

The finding is in line with that of Shen's (2010), which may be explained from the following perspectives: as cognitive strategies are usually concrete strategies and techniques (e.g. note taking, elaboration, inference, etc.) that can be directly employed by students in the actual process of listening, it is understandable that the participants tend to have more and easier access to them, even if they may not receive any targeted strategy training. On the contrary, metacognitive and socio-affective strategies are usually indirect strategies which exert an indirect effect on students' learning process. Technically speaking, metacognitive strategies are used to supervise, manage and regulate behaviors in the process of learning, and socio-affective strategies are expected to assist learners in taking advantage of the learning opportunities, asking for help or manipulating their affect in order to complete a language learning task. These two types of strategies cannot be used simultaneously to solve learners' problems in the listening process in a direct way, so they are very likely to be ignored or underestimated by students, which lead to their low frequency use.

2. Cognitive Strategies

There are a total of 14 items in this dimension, covering note taking, elaboration, inferencing, summarization, transfer, resourcing. The result indicates that Item 21 (While listening, I pay conscious attention to some key words.) scores the highest mean value (4.22) and the lowest standard deviation (0.78). It shows that this strategy is used at a high level by most participants. We can't deny that it is almost certainly a common practice that, while teaching listening skills, most teachers would highlight and recommend the strategy of listening for key words and emphasize its importance and usefulness to their students repeatedly, who therefore become familiar with it. Taking this into consideration, it is not hard to understand why the participants use it in many cases. In the interview, all students mentioned that they would often use this strategy in listening, and Student 2 thought it was particularly effective. It is worth noting that Item 15 (I try to remember the pronunciation of new words and look them up in the dictionary after listening.) shows the lowest mean value (2.43) with the standard deviation 1.10, which indicates it is a "generally unused" strategy by students. In the interview, when asked about the reason, students said it was hard for them to distinguish the pronunciation of unfamiliar words. Besides, some students said it was troublesome to look up new words in the dictionary, and some said they forgot the pronunciation of new words easily after listening to all the texts. As a result, this strategy is used at a low frequency.

3. Socio-affective Strategies

This dimension consists of 7 items, involving questioning for classification, cooperation, reducing anxiety and self-reinforcement. The results reveal that Item 28 (While listening, I can keep calm and I am not nervous.) scores the highest mean value of 3.71 (SD=1.01). Besides, Item 29 (When I feel nervous in the listening process, I will relax myself by breathing deeply or other methods. M=3.48), Item 31 (I always encourage myself to be confident so as to strive for progress in English listening. M=3.66) and Item 32 (I comfort myself when I don't understand what I am listening to. M=3.39) all manifest a higher average mean value than the general mean value of socio-affective strategies (M=3.25). In view of that, it is implied that the majority of students "often" use affective control strategies in their listening process. Interviews with students reveal that although they feel impatient when they can't understand the listening content, they can basically keep clam, try to reduce anxieties by using different methods like self-talk, and build up confidence through self-encouragement and self-comfort. The lowest mean value (2.79) goes to Item 34 (I will exchange my experience of listening with my classmates and teachers and discuss the effective ways to improve my listening with them.), indicating that some students are not willing to communicate with classmates and teachers about their listening problems. In the interview, Student 4 said she usually felt embarrassed or too shy to discuss her problems in English listening with others, and Student 6 expressed that it was unnecessary to ask questions because if something was important, teachers would certainly explain it to them.

4. Metacognitive Strategies

Altogether 13 items are constructed in this dimension to measure students' use of metacognitive strategies, including planning, directed attention, selective attention, self-management, self-monitoring and self-evaluation. Item 1 (Before doing listening exercises, I will figure out my listening tasks by obtaining relevant information from titles or requirements of the items.) scores the highest mean (4.28) with the standard deviation of 0.95. It is therefore inferred that most students are apt to use the strategy of advance organization, i.e., they have developed the awareness of clarifying what to be done to accomplish a listening task. However, Item 4 (I have an overall scheme for extracurricular listening practice, during which there are specific, detailed arrangements for daily and weekly exercises, and the performance has been documented.) scores the lowest mean (2.18) with the standard deviation of 1.08, revealing "functional planning" is the least frequently used strategy by students. The finding here may suggest that the majority of the participants lack a systematic and detailed plan for practicing their listening. In addition, students mentioned in the interview that they needed to learn so many subjects and finish so much homework that it was hardly possible for them to spend much time in learning English, let alone setting aside a regular time to practice English listening.

C. Correlation Analysis between Beliefs and Strategy Use

In this study, Pearson correlation coefficients were computed to explore the relationship between students' beliefs and strategy use for listening comprehension. The correlation coefficient (represented as "r" below) ranges from -1 to +1.

1. Correlation between Overall Beliefs and Strategy Use

Table 9 below shows that the correlation coefficient reaches 0.519 and the correlation is significant at the 0.01 level. The results indicate a strong positive correlation between overall beliefs and strategy use (r= 0.519, p< 0.01), which means students' beliefs have significant influence on their strategy use. Students with comparatively positive and stronger beliefs about EFL listening tend to use strategies more often.

TABLE 9
CORRELATIONS BETWEEN OVERALL BELIEFS AND STRATEGY USE

		Beliefs	Strategies
Beliefs	Pearson Correlation	1	.519**
	Sig. (2-tailed)		.000
	N	94	94
Strategies	Pearson Correlation	.519**	1
	Sig. (2-tailed)	.000	
	N	94	94

**. Correlation is significant at the 0.01 level (2-tailed).

2. Correlation between Categories of Beliefs and Strategies

Pearson correlation coefficients in Table 10 pertain to the relationship between students' belief categories and strategy categories. The significance level of 0.000 suggests that the probability of no correlation between each category of beliefs and strategies is almost zero, i.e., each category of beliefs has correlation with each category of strategies.

TABLE 10
CORRELATIONS BETWEEN BELIEF CATEGORIES AND STRATEGY CATEGORIES

Beliefs ＼ Strategies		Metacognitive strategies	Cognitive strategies	Socio-affective strategies
General understanding of listening	Pearson Correlation	.362**	.253*	.222*
	Sig. (2-tailed)	.000	.014	.031
	N	94	94	94
Strategy-related listening beliefs	Pearson Correlation	.367**	.295**	.411**
	Sig. (2-tailed)	.000	.004	.000
	N	94	94	94
Individual differences-related beliefs	Pearson Correlation	.490**	.436**	.401**
	Sig. (2-tailed)	.000	.000	.000
	N	94	94	94
	N	94	94	94

**. Correlation is significant at the 0.01 level (2-tailed).   *. Correlation is significant at the 0.05 level (2-tailed).

Regarding the first category of belief, the table displays a positive correlation between students' general understanding of listening and all categories of strategies. The correlation coefficient between general understanding of listening and metacognitive strategies reaches .362 and significant at the 0.01 level, while the coefficients between general understanding of listening and cognitive strategies and Socio-affective strategies are respectively .253, .222, with a significant level of 0.05. This shows that students' general understanding of listening has more significant impact on their use of metacognitive strategies. The results are further echoed by the interview results. When asked about the status and function of listening in English learning, Student 1 from the high-score group stressed the important role of listening played in facilitating the acquisition of other skills in English learning. Besides, she was found to use different types of metacognitive strategies, such as planning, reflection, advance organization, comprehension monitoring, and performance evaluation. In contrast, Student 6 from the low-score group believed that listening is mainly useful for communication purpose, so she assumed it was only related to speaking. It was no wonder that he mainly used the strategy of comprehension monitoring, without an overall plan for extracurricular listening practice. In addition, he also expressed his constant confusion about what strategies he can employ to solve problems in his listening practice.

Hence, it can be safely deduced that, to a large extent, students' general understanding of listening may affect the frequency of their use of metacognitive strategies. Students who hold more positive and stronger beliefs about general understanding of listening will know more about the fundamental nature and the defining characteristics of EFL listening as well as the interrelation of listening and other English skills. Therefore, they find it easier to develop metacognitive awareness of listening, and by employing metacognitive strategies frequently, not only are they more likely to plan, organize, monitor and evaluate the listening comprehension process, but also tend to orchestrate the deployment of specific cognitive strategies.

As for strategy-related listening beliefs, it was found to be associated with metacognitive strategies, cognitive strategies and socio-affective strategies (r = .367, r = .295, r = .411), with correlations being significant at the 0.01 level. This means that students' beliefs about strategies are consistent with their strategy use to a significant degree, which is congruent with the result in Liu Hengying's (2011) research. If students believe a certain strategy is effective, they will use it actively and frequently (Wen & Wang, 1996b). For instance, in the interview with Student 2, he repeatedly stressed the usefulness of finding key words in listening. Drawing on his answers in the questionnaire and the interview, we found this strategy was most frequently used by him. Student 3 reckoned that making predictions about the texts was an effective strategy that helped with her listening comprehension, so she used this kind of strategies more often than other ones. In contrast, Student 1, Student 4 and Student 5 believed that guessing the meaning of new words actively helped improve listening comprehension, so in the interviews, they all mentioned that they often guessed the meaning of unfamiliar words based on the context while doing listening exercises.

In terms of the individual differences-related beliefs, results show that they also have positive and significant correlations with the three types of strategies. As shown in table 10, the correlation coefficients reach .490, .436, and .401 respectively and are all significant at the 0.01 level. What has been found suggests that individual differences-related beliefs, which has a lot to do with learning motivation and aptitude, have a great impact on students' use of metacognitive strategies, cognitive strategies and socio-affective strategies. For example, while Student 5 doesn't believe that he can ultimately develop good listening skill and has no confidence in his aptitude, Student 3 has stronger motivation to improve her listening proficiency and strongly agrees that she will develop good listening skill in the end. Hence, when comparing the strategy use of Student 3 and Student 5, it appears that Student 3 uses the three types of strategies more frequently, whereas Student 5 seldom does so.

The finding indicates that students who have strong beliefs about instrumental or integrative motivations, and who have confidence in their own potential in listening skills, tend to use these three strategies more often than students who do not. Once students are highly motivated and have confidence in their aptitude for listening study, they will probably make more efforts and persist in listening practice. It is highly possible that they encourage themselves frequently and seek possible ways from teachers and classmates to improve English listening.

V. CONCLUSIONS AND IMPLICATIONS

It is recognized that listening comprehension is at the heart of L2 learning，and the development of L2 listening skills plays an important role in developing other language skills (Feyten, 1991; Vandergrift, 2007). Research into the aspect of listening will contribute to the whole process of English learning.

Based on an adapted questionnaire and in-depth interviews, this study investigated the English listening beliefs and learning strategies and the correlation between the two variables of 94 tenth-grade high school students in Fujian. The participants were reported to hold various beliefs on EFL listening. In general, most students hold positive beliefs, but some hold negative or improper beliefs, such as ignoring the necessity of learning English cultures and underestimating the important role that listening plays in developing other language skills. In addition, the participants reported a wide range of strategy use, yet the frequency of the overall strategy use was only at the medium level. Detailed analysis of the data shows that cognitive strategies are most frequently used by the participants, followed by socio-affective strategies and metacognitive strategies. Finally, a correlation analysis shows that there exists a significant and positive correlation between English listening beliefs and strategies, which mutually influence each other to varying degrees. Students' general understanding of listening is significantly linked to all three types of learning strategies, with the strongest connection found between listening beliefs and metacognitive strategies.

The teaching implications obtained from this study are as follows:

First and foremost, it is necessary for teachers to identify and evaluate students' listening beliefs, help them change their negative and incorrect beliefs that hinder listening study. For instance, teachers can find out what beliefs their students hold about listening by using methods of observation, reading students' diaries, conducting questionnaire surveys, having interviews, and organizing group discussions (Yang, 1993). In addition, since students' beliefs are generally formed from their limited experience or knowledge, teachers had better provide some knowledge concerning the nature and process of English listening and adjust teaching methods to change students' misconceptions. For example, teachers can introduce more cultural content of English-speaking countries and non-English-speaking countries in the teaching process to raise students' attention to and awareness of the importance of cultural knowledge.

Second, from the analysis of correlations between students' beliefs and strategy use for listening comprehension, it can be easily found that students' self-assessment has a significant impact on their listening study and strategy use. Hence, it is essential for teachers to start with lower level of listening comprehension practice in order to encourage and help them build up positive concept of self-efficacy and therefore facilitate their listening study (Li, 2016; Liu, 2011).

Third, as all the three types of beliefs are found to have significant and positive correlations with metacognitive strategies, it is highly recommended that metacognitive listening strategy instruction should be conducted in teaching of listening. This deserves our attention in that it will not only improve students' use of strategy, but also change learners' probable simplistic beliefs into more realistic beliefs, which are about listening effectively (Shabani & Heidarian, 2015). Once learners adjust their beliefs, they are liable to employ more appropriate and effective learning strategies.

Last but not least, the questionnaire in this study can be used for self-assessment purposes. By using it, students will be able to know what beliefs they hold, what strategies they use most or least and what alternative strategies they can select to improve listening comprehension. Hopefully, with the guidance of teachers, students are able to identify and solve their problems more efficiently.

Despite the teaching implications based on the findings, this study has limitations as well. Firstly, the research used a convenience sampling, with only 100 high school students from one school in Fujian. Secondly, the relationships between students' listening beliefs, strategies and listening scores were not explored. Therefore, in further replication research, a larger and random sample is strongly advised and the relationships between students' listening beliefs, strategies and listening scores can be further investigated. Finally, a longitudinal study can be conducted to gain insights into students' changes of beliefs and strategy use for listening comprehension in high schools.

REFERENCES

[1] Abedini, A., Rahimi, A., & Zare-ee, A. (2011). Relationship between Iranian EFL learners' beliefs about language learning, their language learning strategy use and their language proficiency. *Procedia-Social and Behavioral Sciences*, *28*, 1029-1033.

[2] Azar, E. K., & Saeidi, M. (2013). The relationship between Iranian EFL learners' beliefs about language learning and their use of learning strategies. *English Language Teaching*, *6*(11), 167-174.

[3] Cheng, X. T., & Zheng, M. (2002). *Ying yu xue xi ce lue* [English learning strategies]. Beijing: Foreign Language Teaching and Research Press.

[4] Chiou P. O. (2004). *A comparison of English listening beliefs and strategy use of Taiwanese university students and teachers* [Unpublished doctoral dissertation]. The Texas A&M University- Kingsville.

[5] Cohen, A. D. (2014). *Strategies in learning and using a second language*. New York: Routledge.

[6] Cross, J. (2009). Effects of listening strategy instruction on news videotext comprehension. *Language Teaching Research*, *13*(2), 151-176.

[7] Ellis, R. (2013). *The study of second language acquisition* (2nd ed.). Shanghai: Shanghai Foreign Language Education Press.

[8] Feyten, C. M. (1991). The power of listening ability: An overlooked dimension in language acquisition. *The Modern Language Journal*, *75* (2), 173-180. doi: 10.1111/j. 1540-4781.1991.tb05348.x

[9] Graham, S. (2006). Listening comprehension: the learners' perspective. *System*, *34*(2), 165-182.

[10] Hassan, H. S. (2015). Students' beliefs about learning English language as a foreign language at English Department College of Basic Education Salahaddin University. In Başar Batur & İbrahim Nişancı (Ed.), *6th international visible conference on educational studies and applied linguistics* (pp. 267-284), Iraq: Ishik University.

[11] Horwitz, E. K. (1988). The beliefs about language learning of beginning university foreign language students. *The Modern Language Journal*, *72*(3), 283-294.

[12] Ji, P. Y., & He, M. Y. (2004). Da xue ying yu shi sheng ting li ce lue yan jiu [Effects of listening strategy instruction on news videotext comprehension]. *Foreign Language World*, *(5)*, 40-46.

[13] Kamberi, L. (2013). *The relationship of language learning beliefs and learning strategies*. Lap Lambert Academic Publishing.

[14] Kassem, H. M. (2015). The relationship between listening strategies used by Egyptian EFL college sophomores and their listening comprehension and self-efficacy. *English Language Teaching*, *8*(2), 153-169.

[15] Li, H. (2016). *A survey study of beliefs about English listening learning held by high school students*. Jiangsu: Yangzhou University.

[16] Liu, H. Y. (2011). Ting li xue xi guan nian de qun ti cha yi yu xue xi ce lue de xiang guan xing yan jiu [A study on the correlation between group differences in listening learning concepts and learning strategies]. *Guang dong ji shu shi fan xue yuan xue bao*, *32*(4), 108-110.

[17] Liu, Y. J. (2010). Da xue ying yu xue xi zhe de xue xi guan nian, zi wo xiao neng yu xue xi ce lue xiang guan xing de liang hua yan jiu yu fen xi [Quantitative research and analysis of the correlation between learner belief, self-efficacy and learning strategies of college English learners]. *Foreign Language Education*, *31*(4), 65-69.

[18] Macaro, E. (2008). *Learning strategies in foreign and second language classroom*. Beijing: World Book Inc.

[19] Ngo, N. T. H. (2016). The impact of listening strategy instruction on listening comprehension: A study in an English as a foreign language context. *Electronic Journal of Foreign Language Teaching*, *13*(2), 245-259.

[20] Nix, J. M. L., & Tseng, W. T. (2014). Towards the measurement of EFL listening beliefs with item response theory methods. *International Journal of Listening*, *28* (2), 112-130.

[21] O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.

[22] Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.

[23] Rasouli, M., Mollakhan, K., & Karbalaei, A. (2013). The effect of metacognitive listening strategy training on listening comprehension in Iranian EFL context. *European Online Journal of Natural & Social Sciences*, *2*(1), 115-128.

[24] Rubin, J. (1981). Study of cognitive processes in second language learning. *Applied Linguistics*, *11*(2), 117-131.

[25] Shabani, K., & Heidarian, M. (2015). The effect of metacognitive instruction on l2 learners' listening abilities and beliefs about listening. *Journal of Education and Training*, *2*(2), 221-243.

[26] Shen, J. (2010). *An investigation on English listening strategies used by grade one students in senior high schools*. Jilin: Northeast Normal University.

[27] Sioson, C. I. (2011). Language learning strategies, beliefs, and anxiety in academic speaking task. *Philippine ESL Journal*, *7*, 3-27.

[28] Vahdany, F., Akbari, E., Shahrestani, F., & Askari, A. (2016). The relationship between cognitive and meta-cognitive strategy use and EFL listening test performance. *Theory and Practice in Language Studies*, *6*(2), 385-391. http://dx.doi.org/10.17507/tpls.0602.22

[29] Vandergrift, L. (1997). The listening strategies of second language (French) listeners: a descriptive study. *Foreign Language Annals*, *30*(3), 387-409.

[30] Vandergrift, L. (1999). Facilitating second language listening comprehension: Acquiring successful strategies. *ELT Journal, 53*(53), 168-176.

[31] Vandergrift, L. (2007). Recent development in second and foreign language listening comprehension research. *Language Teaching, 40*(3), 191-210. doi:10.1017/S0261444807004338

[32] Wenden, A.L. (1987). How to be a successful language learner: Insights and prescriptions from L2 learners. In A. Wenden & J. Rubin (Ed.), *Learner strategies in language learning* (pp. 103-118). London, UK: Prentice-Hall International.

[33] Wen, Q. F., & Wang, H. X. (1996a). Analysis of college students' English learning beliefs and strategies. *Journal of PLA University of Foreign Language*, *(4)*, 61-66.

[34] Wen, Q. F., & Wang, H. X. (1996b). The relationship between learner factors and CET-4 scores. *Foreign Language Teaching and Research*, *(4),* 33-39.

[35] Yang, N. D. (1993). *Beliefs about language learning and learning strategy use: A study of college students of English in Taiwan*. Papers from the tenth conference on English teaching and learning in the Republic of China, 193-219.

[36] Yang, N. D. (1999). The relationship between EFL learners' beliefs and learning strategy use. *System, 27*(4), 515-535.

[37] Zhang, Q. Z. (2008). The effect of learner belief on the selection of foreign language learning strategies. *Foreign Language Education, 29* (2), 43-45.

[38] Zhang, Z. H., Feng, H. Y., Fu, Y. L., & Wang, H. (2013). The mediation effect of listening strategies on the relationship between metacognitive awareness and listening performance. *Foreign Language World*, *(5)*, 12-19.

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Speaking Challenges in a Life Skill Program for Islamic Boarding School Students: A Case Study

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Abstract—**The aim of this study was to explore students' speaking challenges in a life skill program at an Islamic boarding school - *Al-Fahd,* South Sumatra, Indonesia. Through using a qualitative case study, we collected data by using in-depth interviews with participants at the research site. Our qualitative data were analyzed through thematic analyses by identifying, describing, organizing, and reporting them within a set of data in the form of themes. We structured our discussion around their viewpoints and the settings in which challenges they met appear. An exploration of the manuscripts or data revealed that major themes related to facing language boundaries, enjoying using mother tongue, coping with psychological issues, looking for interesting topics of conversation. The results of the study indicated that students were challenged by a variety of issues that had prevented them from having a good speaking skill in English although they were involving in a life skill program. Teachers and school leaders should provide them with a well-designed program in order to prepare them to face real life situations after finishing their program.**

Index Terms—**English speaking skills, Life skill program, speaking challenges**

I. INTRODUCTION

Mastering good communication skills refer to speaking performance and to communicate with foreigners, speaking is considered one of the most essential skills to be accommodated. The ability to communicate and deliver a speech is strongly recommended in many life aspects, particularly in education context. Rao (2019) supported that mastering speaking skill through speech allows students to give impressive and outstanding speeches on various occasions, to give public speaking openly, to give presentations for all purposes, to motivate and give impacts to people and to boost up self-confidence. It is in line with what Nunan (1995) states that the most crucial process in learning a second or foreign language is learning to speak in a target language, and the ability to perform a conversation in the target language is the measurement of the success of it. Moreover, Ur (1999) mention that speaking has been considered as the most significant skill among the four. Furthermore, Mukminin et al., (2015, as cited in Marzulina et al., 2021) state that speaking is one of the most challenging skills. Therefore, for foreign language learners, learning speaking has become the greatest interest. Besides, people learn a language in order to develop their proficiency in speaking the target language (Barnard et al., 2002).

Spoken language is different from written language for many reasons. One important reason is that it usually has to be understood immediately. For that reason, spoken language has many different features. Halliday (1989) mentioned that spoken language has several characteristics consisting of variation in speed, loudness or quietness, gestures, intonation, stress, rhythm, pitch range, pausing and phrasing. Moreover, a speech is successful when it has characteristics of effective speakers. Furthermore, King et al. (2009) found five characteristics of effective speakers in

their study; they are invention, arrangement, style, delivery, and memory that are important in spoken language. Although the above characteristics seem usual, but for junior high school students they are difficult as the students are not familiar in English and not get used to speaking English.

Consequently, many institutions have added an extra lesson and program to improve students' English speaking skills. Weaver (2010) defines programs as a group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually. Thus, speaking program is indeed an example of a group related project. According to Harmer (1998), with intensive teacher guidance, speaking activities can give students enormous satisfaction and confidence. Furthermore, Khaljoo (2013) and Marzulina et al. (2021) argued that there are several challenges in teaching and learning English. First are limited hours of English language teaching. Some experts complain about the amount of time devoted to the course and believe that in many cases teachers cannot teach all subjects in this limited time. Second, lack of interest and motivation for learning English. Most students are not interested in learning the language and just think about passing the course. Thus, because they are not interested, they do not listen to their teacher. They do not learn anything. Even if they learn something, they will forget it quickly because they are tired of its repetition. Third is the lack of concentration. When students do not have concentrations, they cannot learn the materials. The fourth is students who are ahead of others. Another difficulty in English teaching relates to those students who attend English classes outside of school. Next, most teachers are lack of proficiency in English language. Unfortunately, most high school teachers are not fluent in English and cannot teach the English language orally. The last is lack of repetition and frequent practices of students. Since students are not interested in learning English, so they will be tired of repeating and practicing the language. Therefore, Anggraini (2018) suggested in her study that English club and other additional English learning activities are needed to support the needs of students in learning English such as young learners. Thus, a good speaking activity would be highly supporting students' speaking ability.

Islamic boarding school *Al-Fahd* is as one of the integrated Islamic boarding schools in Palembang, Indonesia that implements a life-skill program as an obligatory program including speech and daily conversation for the English subject. As a foreign language, teaching English has challenges, such as a lack of proficiency in speaking skills. Mukminin et al. (2015, as cited in Marzulina et al., 2021) mention that speaking is one of the most challenging skills since there has been a lack of literature and information on EFL student teachers' experiences in speaking English in the context of Indonesia. The main purpose of a life-skill program is to enhance students' ability in speaking English and to support students' practice, especially in oral presentation performance. The preliminary study was conducted to find some issues managed by students regarding their speaking performance during the program. The difficulties in expressing the ideas in speaking English become the main problems faced by the students since they prefer to use Arabic to communicate. It is in line with what Songbatumis (2017, as cited in Marzulina et al., 2021) found that students are challenged in learning English by their lack of vocabulary mastery, low concentration, lack of discipline, boredom, and speaking problems. Looking at the issues discussed above, there was a need to conduct a study to explore English speaking challenges in a life-skill program faced by the students at Islamic boarding school *Al-Fahd* Palembang, Indonesia.

II. LITERATURE REVIEW

A. *The Nature of Speaking*

Speaking is the verbal use of language to express ideas, opinion, and feelings. Thus, it is an essential element in delivering the information, communicating concepts, ideas, and knowledge to others. Furthermore, non-linguistic elements such as expressions, body language, and gestures are needed in directly conveying messages. Brown (2001) argues that the important key in interactive language function is social contact, in which the way you convey with body language, eye contact, gestures, physical distance and other nonverbal messages are playing a part. It can be assumed that speaking is a productive skill produced through both oral and body language. There are some types in speaking performance. Brown (2001) mentioned seven types of speaking performance; they are (1) imitative, the ability to imitate a word, phrase, or sentence; (2) intensive, the production of short stretches of oral language as stress, juncture, intonation, and rhythm; (3) responsive, including interaction and comprehension test but sometime in the form of a very short conversation such as standard greeting, small talk, simple request and comments; (4) interactive, the length and complexity of the interaction as a longer way which sometimes includes multiple participants or multiple exchanges. (5) Extensive, monologue including story-telling, presentations, or speeches. (6) Transactional, exchanging or conveying specific information in the form of extended responsive language. (7) Interpersonal, maintaining social relationship for the transmission of information and facts.

Speaking is a complex skill which needs simultaneous use of different abilities, and often develops at different rates. As Harris (as cited in Kurniati et al., 2015) classified the components of speaking into five categories; they are (1) comprehension, the ability to understand by a reasonable comprehension of the subject or as the knowledge of what a situation is really like. That's why it is a need to make people get the information they deserve. (2) Grammar, knowing a certain amount of grammar and vocabulary is important in order to produce the correct sentences in conversation, (3) vocabulary, the basic elements in language. Folse (2016) comments that vocabulary is a set of phrases, variable phrases, single words, idioms, and phrasal verbs. A barrier that hampers the students from learning a language is included into

limited vocabularies, (4) pronunciation, the ways to pronounce the words in the correct way using the appropriate intonation and stress, as well as speaking in connected speech. In order to make the process of communication easy to understand, pronunciation plays a vital role, (5) fluency, the ability to read, speak, or write easily, smoothly and expressively.

B. The Important of Learning Speaking

English is served as the idea of connecting people who live in various regions, countries and continents. Besides, speaking also plays a necessary role in our lives. Barnard et al. (2002) declare that for many foreign and second language learners, the speaking skill mastery in English is a priority. Then, Ur (1996) mentions that speaking skill as the most vital skill as compared to other three English skills (reading, writing, and listening). It is because people who actually know language are indicated as speakers of a particular language. Thus, using a language is more meaningful than just knowing its implementation. In this globalization era, everything is connected through speaking skill. Brown and Yuke (as cited in Rao, 2019) said that the skill that the learners judge most in real condition or situation is speaking skill. Moreover, the ability to speak is necessary for learners who intend to build up career, raise up confidence level, do international business, interact with people around the globe, deliver speeches and presentation, conduct interviews, conduct debate, and participate in discussions or various conferences. The one who has a good ability in speaking can face the world. The job seekers must have a better oral communication. This is in order to obtain better job opportunities. Presenters should present the presentation properly to get the attention from the audience. It is in line with what Westrub (2003) states that a student who can speak well may have a greater chance for further education, find employment, and gaining promotion.

C. Challenges in Speaking Activities

There are multiple factors that cause difficulties in speaking. Abrar et al. (2018) found that language barriers are usually found such as vocabulary, pronunciation, fluency, and grammar as the challenges in speaking English. In addition, Ur (1996) classified some problems in speaking into four areas: 1) inhibition: learners are fearful of critic, worried about making mistakes, or simply shy. Furthermore, Littlewood (2007) added that apprehension and inhibition can also appear in language classroom and cause difficulties for the students. 2) mother-tongue use: learners tend to use their mother-tongue in speaking class due to its effectiveness. Then, Lynch (2008), Fajaryani et al. (2018), and Marzulina et al. (2021) mention three most crucial challenges in teaching and learning English in classroom. First is lack of motivation in which learners may not have inspired and interested towards the learning of English language. They fear failure in exams and even in classroom interaction, so they cannot get involved easily in classroom interaction and learn the language comfortably. They must be motivated by teachers to learn English in classroom interaction. Second, insufficient time allocation, resources, and materials, English is a foreign language, and hence it cannot be learned and taught as easily as a mother tongue or first language. And when it is learned or taught as a second language, it requires a long time and simultaneously adequate resources and materials to create an English classroom climate that facilitates teaching-learning process. Third, over-crowded classes, the number of students in a classroom can range from one, for those who teach individual private students, to fifteen or twenty students in a typical classroom up to multitudes of thirty-five or forty or even fifty or more students packed into a language leaning situation. The large classes create several problems such as discomfort, less attention, evaluation, difficulty in managing class, maintaining learning effectiveness, etc.

Furthermore, Manrique (2013) argues that mispronunciation and grammatical mistakes are the most usual varieties of interference between the mother tongue and target language. Then, it is supported by Harmer (2015) that there are some reasons why learners keep using their mother-tongue during speaking class. First, they have not enough knowledge about the topic that the teachers ask to talk about. Second, if the teachers do not urge their students to talk in English, they will naturally use it. In addition, if the teacher regularly use their students' mother-tongue language, they will feel comfortable to do so. 3) Low or uneven participation: in a class with a large number of students, each of them has very limited time to talk since some of them probably dominate the whole class while the others talk very often or not at all. 4) Nothing to say: learners have no motivation to express themselves. Rivers (as cited in Pratolo et al., 2019) mentions that students do not have something in mind because the teachers give them a topic that is not suitable for them. Also, Westrup (2003) adds that when the teacher ask students to tell things in a foreign language, it is difficult for students to answer when they have little opinions about the topic, or when they do not know what vocabulary to apply and how to use grammar correctly. In addition, Raba'ah (2005) in her study found many factors that cause difficulties in speaking English among EFL learners such as the speaking environment, the curriculum, teachers themselves, and the teaching strategies. Furthermore, Xiao and Wong (2014) found other factors that language anxiety as a negative feeling and psychological tension experienced by students in learning language. Then, Pratolo et al. (2019) also found that external factors such as classroom environment, negative comments from friends or uneven participation can also prevent students from being active in speaking.

D. English Speaking Program

Speaking program is a group created to stimulate students to be active in speaking activities among others. It is in line with what Weaver (2010) states that speaking program is a collection of strategies designed to strengthen the

process of teaching and learning activities to achieve the target. The programs are designed to support the students to have good academic achievement, particularly speaking mastery. Students are able to speak in English by joining the speaking program happenings (Moulida, 2019). In our study, boarding school is the institution providing English speaking program for students. The program has an important role in teaching. The implementation of English speaking program in boarding schools should be based on the program supporting students in learning speaking through speaking activities. Harmer (1998) mentioned that speaking activities can give students enormous confidence and satisfaction, and with intensive teacher guidance can encourage them in their further study. Therefore, good speaking activity should support students' speaking ability. It is supported by Shi and Nunan (2000) that mastering speaking is the most important aspect of learning a second or foreign language, and the success is measured in terms of the ability to carry out a conversation in the target language. Additionally, this statement is also supported by the Indonesian Ministry of Education (2002) that suggests a life skill program as the one intended to provide knowledge, skills, attitudes and practical and functional abilities to work independently, open employment and business fields and take advantage of opportunities so that they can improve the quality of their welfare. In order words, life skill programs in Islamic boarding school, *Al-Fahd* is defines as a program that provides multiple kinds of subject skills to support the needs of students to face the demand of life in English speaking activities. The main purpose of life skill programs in Islamic boarding school, *Al-Fahd* is to support student's practice and to enhance their English, especially in oral presentation performances. The program is meant to train the students in delivering speech and to practice their languages as well. Thus, life skill program can give positive impacts on the students in speaking performance as well as their English competence.

III. METHODOLOGY

A. Participants

The participants of this current study were eight EFL learners in an Islamic boarding school - *Al-Fahd* Palembang, Indonesia. Participants were selected by using a purposeful sampling method. There were some characteristics in selecting eighth students as the participants of the study. First, since the study was conducted at an Islamic boarding school, only female students were allowed to be selected as the participants of the study. Second, only the students who had already joined at least one year the life skill program were accessible for the participants.

B. Data Collection and Analysis

In this study, interviews were used to collect the data on students' challenges in improving their speaking through life skills program. Gilham (2005) defines interview as a conversation between two people where a response of a particular purpose is needed. In this study, interviews were used by asking respondents orally in order to obtain the information for research (Muazza et al., 2018; Muazza et al., 2019). One-on-one interview was used in this study (Mukminin & McMahon, 2013). Creswell (2012) defined one-on-one interview as a process of data collection in which questions are asked to one participant only, and the answers were recorded at the time. Furthermore, open-ended questions were used to gain a lot of information from the students' challenges in speaking English in the life skill program. In this process, the interviews were taken verbally and recorded for 5-15 minutes to collect the data. To analyze the data on students' speaking challenges in life skills program, several steps in thematic analysis were accomplished. There are six steps in thematic analysis, they are: analyzing, identifying, describing or organizing and for reporting a theme within a set of data (Braun & Clarke, 2006).

IV. FINDINGS

The results of the present study were categorized based on emerging topics from the results of the interviews. The results showed some challenges faced by the students when speaking English in life skill program. The following results of interviews showed the students' challenges in speaking English in life skill programs. The challenges faced by students in speaking English in life skill program were divided into four categories, including facing language boundaries, enjoying using mother tongue, coping with psychological issues, looking for interesting topics of conversation.

TABLE 1
THEMES AND CODES FOR CHALLENGES FACED BY STUDENTS IN SPEAKING ENGLISH IN LIFE SKILLS PROGRAM

No	Themes	Codes
1.	facing language boundaries	No fluency in speaking and hard to produce a good sentence during the life skill program.
		Limited vocabulary and poor pronunciation
		Complicated to use different forms of verbs properly in speaking
2.	enjoying using mother tongue	Often use their mother tongue to speak
		Often mix the words with their mother tongue in speaking
3.	coping with psychological issues	Feel anxious in speaking to others
4.	looking for interesting topics of conversation	Find some interesting topics that challenge them to speak

A. Facing Language Boundaries

Based on the data from the interview, it was found that some challenges related to language boundaries such as fluency, vocabulary, pronunciation, and grammar were faced by the students. First, all of the participants shared their experiences with the researchers related to the program they preferred to learn in English and to have interest in learning the language. However, they sometimes faced some difficulties. Vocabulary was mentioned as an obstacle in speaking English. Student 3 said, "*When it comes to English speaking I always think about the vocabulary first, sometimes I forgot the vocabulary I've learned right before I want to speak*" (interview, January 19, 2021). Meanwhile, 5 other participants stated the similar obstacle. Pronunciation is revealed as a problem like vocabulary and has challenged students in speaking English. They said that pronunciation was one of the factors that were complicated for them in speaking English. Some of them stated that some words were difficult to be pronounced. Student 1 mentioned, "*It's difficult because of my pronunciation, I feel like I still often made a lot of mistakes when I speak*" (interview, January 19, 2021) while the other 5 had the same opinion about pronunciation.

The data from interview showed that students encountered some problems in using correct English grammar. Some students said that grammar was difficult for them due to the terms of sentence structure. They worried that others might misunderstand them. Student 5 stated that, "*I feel that it is quite complicated because the verb of English has many forms and it makes me confused when I want to speak English, I am afraid that I would make a mistakes and cause a misunderstanding*" (interview, January 19, 2021). Students 6 and 8 also said the similar opinion about it. Fluency was also revealed by the students as a challenge in speaking English. Based on the interview, the students said that it was hard for them to speak English fluently. As student 7 said, "*I'm not fluent in English so I often mix it with other languages as well*" (interview, January 19, 2021). Student 2 and 8 also said the similar things about fluency.

B. Enjoying Using Mother Tongue

The data from interview showed that students had difficulties in speaking English because of the influence of their mother tongue. Student 4 stated that, *"I feel that my speech is still influenced by my mother tongue. I used to speak Indonesian so it becomes really stiff when I speak in English"* (interview, January 19, 2021). Students 5 and 6 also said the same thing on the influence of their mother tongue. They also used their mother tongue because lack of vocabulary in English. Students often mixed an English sentence with their mother tongue. Based on the interview, student 3 said, "*when I don't know the meaning of a word I will mix it with my mother tongue*" (interview, January 19, 2021). Student 1, 6, and 7 also said the same opinion about their mother tongue.

C. Copying with Psychological Issues

Beside language boundaries, we found that psychological issue can also influence students' speaking performance. Based on the data obtained from interviews, the researchers found that most of the students felt anxious when they were speaking English in front of teachers, classmates, and other people. Student 1 claimed that, "*I feel nervous when I speak in front of my teacher. I also feel kind of anxious because I'm afraid that my friends will make fun of me when I made a mistake*" (interview, January 19, 2021). Student 6 also said that, "*I feel shy and kind of nervous when I have to speak in front of the teachers, and it's awkward when I speak English to my friends because I'm not used to it yet.*" (Interview, January 19, 2021). Meanwhile, the other 4 participants mentioned the same opinion.

D. Looking for Interesting Topics of Conversation

It was found that most of the students were influenced by the topic of conversation shared by their teacher. A certain topic can influence them to speak. Student 3 stated that, "*If the topic is interesting, I'll get excited about it*". (Interview, January 19, 2021). Student 1 also said that, *"Topics about ambition, family, and best friends usually make me excited and challenge me to speak English more".* (Interview, January 19, 2021) and student 4 shared a similar opinion, "*there are some topics that make me want to speak English. I like the topic about letter because it is fun.*" (Interview, January 19, 2021). The data indicated that topics of conversation should be considered as it can get more attention from students.

V. DISCUSSIONS

The results of analyzing data using thematic analysis found some challenges faced by students in speaking English in life skill program. They are facing language boundaries, enjoying using mother tongue, coping with psychological issues, looking for interesting topics of conversation. The first is language boundaries. It was found that some challenges related to language boundaries such as fluency, vocabulary, pronunciation, and grammar were faced by the students. This finding is in agreement with a previous study conducted by Abrar et al. (2018) who found that the challenges that was usually faced by students in speaking English was the language barrier such as vocabulary, pronunciation, grammar, and fluency. The students agreed that having a limited number of vocabulary is one of their weaknesses in speaking English. This is supported by Pratolo et al. (2019) who found that vocabulary was mentioned as the main obstacle in speaking English and it made students passive to speak. Pronunciation was revealed as another problem beside vocabulary, students agreed that pronunciation was one of the factors that complicate them in speaking English. This finding is supported by Abubakar et al. (2017) who found that some students had difficulties related to pronunciation as they did not know how to pronounce the words correctly. The other language barrier such as

grammatical issues is related to the finding of a study conducted by Rahayu (2015) who found that lack of understanding of grammatical patterns is one of problems that students faced and lack of knowledge in grammar may influence students to speak in English.

The second issue is mother tongue. It was used by students when they forgot some words in English or when they encountered difficulties to pronounce a certain word in English. The finding indicated that most of the students had difficulties in speaking English due to the influence of their mother tongue. Marcela and Manrique (2013) say that mispronunciation and grammatical mistakes are the most usual varieties of interference between the mother tongue and target language. This finding is in agreement with the study of Al-Hosni (2014) who found that one of the main speaking difficulties encountered by students is the use of mother tongue. They are unable to speak in English because they are lacking in vocabulary items, grammar structures and sentence formation skills which result in the use of mother tongue. It is supported by the study of Leong and Ahmadi (2017) who found why learners use their mother tongue in speaking classes are because they are asked to talk about the topics they do not know. When the teachers do not urge them to speak in English, it is normal for them to use their mother tongue.

We also found that psychological issues influenced students' speaking performance. The finding indicates that most of the students feel anxious when they speak English in the front of their teachers, classmates, and other people. This finding is in agreement with the study of Pratolo et al. (2019) who found that anxiety reveals as one of the challenges that are mostly faced by students. They believe that anxiety makes them hesitate to speak. Woodrow (2006) adds that anxiety has a negative effect on the oral performance of English speakers. This finding is supported by Park and Lee (2014) who found that students' anxiety level had a negative relationship to their oral performance.

Another interesting finding is the topic of conversation. Our finding indicated that most of the students revealed that the topic of conversation influenced their speaking skill in the classroom. Some students said that the topics were sometimes difficult for them and not interesting. Rivers (as cited in Pratolo et al., 2019) said that students often have nothing to say probably because an appropriate topic is selected for them. They also have not enough information about the topic. The above idea is supported by Baker and Westrup (2003) who state that students have difficulties to answer when the teacher asks them to tell things in a foreign language when they do not understand or even are not familiar with the topics.

VI. CONCLUSION

Based on the results of data analysis, the findings of this study indicated that challenges faced by students during the life skills program were facing language boundaries, enjoying using mother tongue, coping with psychological issues, looking for interesting topics of conversation. This research only focused on analyzing the challenges that the students faced during the program without giving the solution to overcome the students' challenges due to time limitation and access to get the data. By knowing the factors that challenged the students during the program, we expect the students to improve their English competence such as grammar, pronounce and vocabulary. We hope that the students try to be more confident to speak English, so they can reduce their anxious feeling. Subsequently, for the teachers, it would be better if they could make a syllabus of what the teachers are going to teach. It also would be better if the teacher could facilitate the needs of students by providing various methods, approaches, strategies, and techniques to improve their vocabulary, pronunciation, grammar, and fluency as the effect of mother tongue in speaking English is no exception. Last, we hope the next researchers who are interested in conducting similar research could explain on the effective strategies in order to cope with the speaking challenges which are not clearly explained in this study.

REFERENCES

[1] Abrar, M., Mukminin, A., Habibi, A., Asyrafi, F., Makmur, M., & Marzulina, L. (2018). "If our English isn't a language, what is it?" Indonesian EFL Student Teachers' Challenges Speaking English. *Qualitative Report*, 23(1), 129–145.
[2] Anggraini, D. R. (2018).Challenges in teaching English to young learners. *Jurnal Bahasa & Sastra, 18*(2), 141–146.
[3] Abubakar, B., Atmowardoyo, H., & Korompot, C. A. (2017). The challenges in undertaking English speech training program at an Islamic boarding school: A study of students' Perspectives. *ELT Worldwide: Journal of English Language Teaching, 4*(2), 125-139.
[4] Al Hosni, S. (2014). Speaking difficulties encountered by young EFL learners. *International Journal on Studies in English Language and Literature (IJSELL)*, 2(6), 22-30.
[5] Braun, V., & Clarke, V. (2006).Using thematic analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
[6] Barnard, R., Richards, J. C., & Rodgers, T. S. (2002). Approaches and methods in language teaching. *TESOL Quarterly*, 25(3), 481-520.
[7] Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy*. New York, NY: Addison Wesley Longman.
[8] Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. London: Pearson.
[9] Fajaryani, N., Masbirorotni, Nuraini, Nafrail, & Nopianti. (2018). Different *madrasah*, but the same stories: Academic and non-academic challenges encountered by teachers in teaching a foreign language. *Ta'dib Journal of Islamic Education, 23*(1), 66-84.
[10] Folse, K. (2016). *Vocabulary myths*. Michigan: University of Michigan Press.

[11] Gilham, B. (2005). *Research interviewing: The range of technique*. New York: Open University Press.

[12] Harmer, J. (2015). *The practice of English teaching language*. London: Longman Handbooks for Language Teaching Series.

[13] Harmer, J. (2007).*The practice of English language teaching* (4th ed). Cambridge: Pearson Longman.

[14] Harmer, J. (1998). *How to teach English: An introduction to the practice of English language* teaching. Harlow: Longman.

[15] Halliday, M. A. K. (1989). *Spoken and written language*. Oxford: Oxford University Press.

[16] The Indonesian Ministry of Education. (2002). *The pattern of implementing life skills-oriented education through BEE for PMU*. Jakarta: Ditjen Dikdasmen.

[17] Kurniati, A., Eliwarti, E., &Novitri, N. (2015). A study on speaking ability of the second year students of SMK Telkom Pekanbaru. *Journal Online Mahasiswa Fakultas Keguruandan Ilmu Pendidikan Universitas Riau, 2*(2), 1-14.

[18] King, J., Lakkaraju, K., &Slagell, A. (2009). A taxonomy and adversarial model for attacks against network log anonymization. pp.1268-1203. *Proceedings of the ACM Symposium on Applied Computing.*

[19] Leong, L. M, &Ahmadi, S. M. (2017). An analysis of factors influencing learners' English speaking skill. *International Journal of Research in English Education, 2*(1), 34-411.

[20] Littlewood, W. (2007). Communicative and task-based language teaching in East Asian classrooms. *Language Teaching, 40*(3), 243-249.

[21] Marzulina, L., Harto, K., Erlina, D., Holandyah, M., Desvitasari, D., Arnilawati, A., Fridiyanto, F., Mukminin, A., (2021). Challenges in Teaching English for EFL Learners at Pesantren: Teachers' Voices. *Theory and Practice in Language Studies, 11*(12), 1581-1589.

[22] Marcela, C., & Manrique, R. (2013). Mother tongue interference over foreign language: A case study about an oral production in a Columbian Public University. *Opening Writing Doors Journal, 9*(1), 91–119.

[23] Manrique, C. (2013). *Mother tongue interference with foreign language: A case study about A2 oral production in Columbian public University*. Columbia: Columbian Public University.

[24] Moulida, I. (2019). *Students' challenges in English public speaking program at Dayah Darul Ihsan* [Master's Thesis]. Ar-Raniry State Islamic University.

[25] Muazza, M., Mukminin, A., Habibi, A., Hidayat, M., & Abidin, A. (2018). Education in Indonesian Islamic boarding schools: Voices on curriculum and radicalism, teacher, and facilities. *Islamic Quarterly, 62*(4), 507-536.

[26] Muazza, Mukminin, A., Rozanna, E. S., Harja, H., Habibi, A., Iqroni, D., Marzulina, L., Harto, K., Nurulanningsih. (2019). Caring the silenced voices from an Islamic boarding school-pesantren: Stories of volunteer teachers and policy implications. *Dirasat: Human and Social Sciences, 46*(3), 270-279.

[27] Mukminin, A., & McMahon, B. J. (2013). International graduate students' cross-cultural academic engagement: Stories of Indonesian doctoral students on an American campus. *Qualitative Report, 18*(35), 1-19.

[28] Mukminin, A., Novprival, N., Masbirorotni., Sutarno., Arif, N., & Maimunah. (2015). EFL Speaking Anxiety among Senior High School Students and Policy Recommendations. *Journal of Education and Learning (Edularn), 9* (3), 217-225.

[29] Nunan, D. (1995). Closing the gap between learning and instruction. *TESOL Quarterly, 37*(4), 589-613.

[30] Ur, P. (1999). *A course in language teaching trainee book*. Cambridge: Cambridge University Press.

[31] Pratolo, B., Habibie, A., & Setiawan, A. (2019). Speaking skill challenges encountered by Indonesian EFL learners. *Proceedings of the 2019 Ahmad Dahlan International Conference Series on Education & Learning, Social Science & Humanities (ADICS-ELSSH 2019)*

[32] Park, H., & Lee, A. R. (2005). *L2 learners' anxiety, self-confidence and oral performance.* Presented at the 10th Conference of Pan-Pacific Association of Applied Linguistics.

[33] Rabab'ah, G. (2005). Communication problems facing Arab learners of English. *Grazer LinguistischeStudien, 63*(1), 63–75.

[34] Rao, P. S. (2019). The importance of speaking skills in English classrooms. *Alford Council of International English & Literature Journal(ACIELJ), 2*(2), 6-18.

[35] Rahayu, N. (2015). *An analysis of students' problems in speaking English daily language program at husnul khotimah Islamic boarding school* [Unpublished Undergraduate Thesis]. IAIN SyekhNurjati, Cirebon, West awa, Indonesia.

[36] Shi, L., & Nunan, D. (2000). Second language teaching and learning. *TESOL Quarterly*, *34*(2), 369-370.

[37] Songbatumis, A. (2017). Challenges in teaching English faced by English teachers at MTsN Taliwang, Indonesia. *Journal of Foreign Language Teaching and Learning, 2*(2), 54-67.

[38] Weaver, P. (2010). *Understanding programs and projects—oh, there's a difference!* Paper presented at PMI® Global Congress 2010—Asia Pacific, Melbourne, Victoria, Australia. Newtown Square, PA: Project Management Institute.

[39] Woodrow, L. (2006). Anxiety and speaking English as a second language. *RELC Journal, 78*(2), 155-167.

[40] Westrub, B. (2003). *Students' interest in speaking*. Cambridge: Cambridge University Press.

[41] Xiao, Y., & Wong, K. F. (2014).Exploring heritage language anxiety: A study of Chinese heritage language learners. *The Modern Language Journal, 98*(2), 589-611.

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Comparing English Language Learners' Perceptions of How Reliable Computer-Based, Teacher-Based, and Peer Feedback Is: A Case Study

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Abstract—The literature emphasises the role of feedback (FB) in writing development, leading to explorations of different types of FB to provide, such as teacher-based FB (TBF), peer feedback (PF) and computer-based feedback (CBF). This quasi-experimental study aimed to investigate EFL learners' perceptions of the reliability of TBF, PF and CBF. The participants (n = 40) were Saudi male EFL students in a BA English programme at a Saudi university. The study employed an experimental group (n = 21) and a control group (n = 19). For data collection, pre- and post-intervention questionnaires were administered. The intervention exposed the participants to giving and receiving PF and introduced them to CBF. Following training in providing PF and using the automated system, the participants went through four cycles of writing during which they developed four essays; with each essay, PF and CBF were employed to produce multiple drafts. The main findings indicated that TBF was perceived to be the most reliable type of FB, and that CBF was considered more reliable than PF. Additionally, our findings suggest that the more students are exposed to CBF, the more likely they are to accept it. Pedagogical implications arising from these findings are also discussed.

Index Terms—feedback, automated systems, reliability, academic writing, perceptions

I. INTRODUCTION

In most EFL countries, English dominates to such an extent that many institutions shift much of their attention to teaching English. In fact, English has become the language of instruction in several undergraduate and graduate programmes. This has created an increased demand for higher education (HE) institutions in EFL countries to provide high-quality English language teaching. In academia, the focus of English teaching is on the four language skills, with writing skills being given the most attention. Writing is the main form of communication between students and their instructors, and instructors base their assessments mainly on students' written work (e.g. homework, assignments, projects and reports). According to the literature on L2 teaching and learning, how to develop writing skills is clearly of significant concern to researchers and practitioners. Therefore, it appears that writing plays a prominent role in teaching and learning in general (Bitchener & Ferris, 2012; Cho & Schunn, 2007; Gibbs & Simpson, 2004).

An aspect of language learning that is regarded as an essential component for learning development is the provision of feedback (FB) to learners (Gibbs & Simpson, 2004; Haigh, 2007; Lee, 2007; Miller, 2009). Hyland and Hyland (2006) argued that FB had a positive impact on language proficiency and stimulated learners' motivation to learn languages. For these reasons, the nature of FB and how best to provide it in L2 contexts has been explored. In English writing teaching, several FB types have been identified, such as teacher feedback (TBF), peer feedback (PF) and computer-based feedback (CBF). The literature shows that TBF and PF have been thoroughly investigated from different perspectives (Bitchener & Ferris, 2012; Ferris & Roberts, 2001; Reid, 1997; Rollinson, 2005), but CBF has yet to be similarly examined. FB generated by computers is a relatively new topic that has gained much attention in recent years, in part because of the rapid development in technology and educational needs (Burkhart et al., 2020; Chang et al., 2017; El Ebyary & Windeatt, 2017; Lachner & Neuburg, 2019; Zaini & Mazdayasna, 2015), and in part because of the COVID-19 pandemic that the world has experienced since early in 2020. Investigations into CBF have branched out beyond the domain of language learning to include other learning domains such as accountancy (Helfaya, 2019) and medicine (Chang et al., 2017).

Previous research has focused on investigating learners' perceptions of the educational environments offered to them (Chien et al., 2020; Chou, 2020; Fu et al., 2019; Sletten, 2017; Wei & Chou, 2020). More specifically, a common practice associated with FB research is to explore learners' perceptions of the FB provided to them regarding their written texts (Cohen & Cavalcanti, 1990; Lizzio & Wilson, 2008; Peterson & Irving, 2008). Several studies have concluded that integrating technology into teaching and learning languages can positively influence the learning process (Cheung & Slavin, 2012; Li, 2006; Li, 2021; Zaini & Mazdayasna, 2015). In fact, technology can change learning experiences and quality by introducing innovative methods and sources for language learning and teaching that can

create a student-centred situation, engage learners deeply in their own learning and allow them to become active rather than passive learners (Chang & Windeatt, 2021; Walker & Patel, 2018). A number of studies have asserted that more learning outcomes will be achieved if learners have already formed positive perceptions of the integration of technology into their own learning processes (Alzahrani & O'Toole, 2017; Wei & Chou, 2019); as a result, it can facilitate deeper learning (Mohamed, 2008). Although the literature reflects an increasing interest in CBF in L2 writing, it provides very limited evidence that this area has been explored in the context of higher education in Saudi Arabia, especially in terms of perceptions of CBF. English is taught in Saudi Arabia as a foreign language (i.e. in an EFL context), and CBF is a new concept in higher education which may or may not be accepted by learners. To my knowledge, only one study has explored CBF and PF in Saudi higher education (Alnasser, 2018). However, the scope of that study was whether PF and CBF can jointly replace teacher FB, which is completely different from the scope of the current study. This study aims to investigate how Saudi EFL learners perceive the reliability of TBF, PF and CBF, and which of these three sources are perceived as more reliable. This study holds that this investigation can provide insights into the nature of the three types of FB and that critical pedagogical implications can accordingly be drawn.

II. BACKGROUND

A. The Nature of Writing Skills and Their Development

EFL Practitioners around the world are frequently concerned with the deterioration of their learners' writing skills (Cho & Schunn, 2007), a concern that justifies the predominant interest in examining the nature of this skill and how it can be improved. In fact, it has been proposed that writing skills correlate with other language skills in that the better the writing skills, the better the other language skills become, and vice versa (McCutchen, 2011; Gomez et al., 1996). Cho and Schunn (2007) argue that students with well-developed writing skills are expected to overcome difficulties in most disciplines because their success is demonstrated mainly by measuring their knowledge in written form. Many HE institutions worldwide admit international students on condition that they meet the language requirements of an English standardised test (e.g. TOFEL, IELTS) and normally require that they meet a specific level in the writing component. Such conditions suggest that mastery of the English language is important, and that mastery of writing skills is particularly important for success in international higher studies.

Since the early 1970s, FB has been at the heart of writing education, with a focus on how to employ it effectively to achieve significant learning outcomes. This trend emerged to cope with the shift from teacher-centred to learner-centred teaching approaches in an attempt to allow FB to promote the learning of writing (Hyland & Hyland, 2006). Phuwichit (2016) argued that FB promoted writing development, as it informatively signified students' weaknesses (to overcome them) and strengths (to further support them). Here, the manner of FB delivery was crucial and influenced the motivation and perceptions of learners toward the learning situation (Grabe & Kaplan, 1996). Van Steendam et al. (2010) hold that for FB to be effective, it should be provided in an *adequate* and *timely* manner. Adequate FB in writing is described as 'detailed feedback which addresses global concerns in a text, uses metalanguage to diagnose textual problems, and suggests specific revisions' (ibid, p. 319) and can significantly impact learning (Tang & Thitecott, 1999; Van Steendam et al., 2010). Timely FB refers to FB that students receive shortly after completing a task (Brown et al., 2006; OECD, 2005). Other studies have gone this area of inquiry to provide even more effective FB and have examined areas such as whether the focus should be on global or local writing issues (Hyland, 2003; Min, 2008; Truscott & Hsu, 2008) and whether the FB should be focused or selective (Ferris, 1995; Gibbs & Simpson, 2002).

Nonetheless, practitioners who teach writing skills in higher education may encounter difficulties in providing timely and adequate FB to their students for several reasons. For instance, the number of students participating in higher education is increasing every year, and part of the requirements is to master writing skills in preparation for their academic studies. The nature of writing is not only *complex* – it is seen as more complex than other language skills, and the proper way to learn writing skills is by producing multiple drafts (Min, 2008). These factors may put practitioners in a difficult situation by preventing them from offering every student the attention they need (Grimes & Warschauer, 2010). It has been argued that some L2 students worldwide expressed dissatisfaction with the FB they received because they perceived it as insufficient and inadequate (Huxham, 2007). El Ebyary and Windeatt (2010, p. 122) proposed a way around this dilemma by integrating technology, specifically by employing the 'intelligent computer-assisted language learning (CALL)' They define this concept as 'computer applications which can interact with the material to be learned, including providing meaningful feedback and guidance' (ibid, p. 122).

B. Teacher and Peer Feedback

Hyland and Hyland (2006) argued that effective FB has several modes that enable two parties to interact with one another when giving and receiving FB. Of course, teachers are the most traditional providers of FB to learners. Learners in EFL contexts attach a great deal of importance to the written responses they receive from their instructors and value them even more than verbal responses (Hyland & Hyland, 2006). Writing conferences between instructors and students (i.e. one-to-one mediation) are commonly employed to provide feedback and discussion, and to highlight concerns observed in written texts. Williams (2002) noted that the Vygotskian concept of scaffolding is thought to be closely related to these conferences, as they can significantly develop writing skills. However, providing TBF proved to be

exhausting and time-consuming and led to a search for more supportive learning tools. One such tool involved students providing informative FB to their peers (Latifi et al., 2021; Rollinson, 2005; Yu, 2021). Rollinson (2005) argued that students tended to accept FB offered to them by their peers and revised their texts accordingly. PF can stimulate students' critical thinking, promote interaction and negotiation, and create a less formal situation than they have with their instructors. Such merits have encouraged instructors to integrate this technique into writing classes. On the other hand, learners might not value PF as much as is hoped for and, therefore, might not accept the PF offered to them (Hyland, 2003). As a result, they may be uncomfortable using this technique (Rollinson, 2005). Another major concern regarding this technique is its reliability (Leki, 1990; Hyland, 2003). Researchers have attempted to overcome this concern by offering professional training in how to provide PF (Min, 2008). This technique has been extensively examined in the literature. It offers instructors a supportive means for writing development that covers a larger number of students, allowing them to provide FB to learners more frequently and in a timely manner. More recently, innovative technologies have presented higher education with automated FB on written texts that are seen as supportive in writing classrooms. Because technology-based FB tools are relatively new, I discuss their relevant theoretical underpinnings in a separate section.

C. Automated FB (CBF)

The continuous development of emerging technologies and their integration into education has become an area of interest in almost every field (Burkhart et al., 2020; Chang & Windeatt, 2021; Walker & Patel, 2018). This interest increased during the recent COVID-19 pandemic. The interruption to students' learning in all sectors worldwide caused by the pandemic has resulted in greater reliance on what technology can offer the educational system, for example, to activate distant learning (Morgan, 2020). The pandemic has led to heavy reliance on computers to access online platforms such as Webex and Microsoft Teams, for students to make online submissions, for online examinations, and for using online materials and accessing databases (Hoq, 2020; Tanveer et al., 2020), all of which are related to the learning process, including language learning.

Some practitioners and researchers have resisted introducing technology into writing instruction. They claim that technology might have a negative influence on student writers as they could become reliant on auto-corrective software, and it may not allow for sufficient manual practice with pen and paper (Chen et al., 2011; Jarom et al., 1991). Nonetheless, most researchers have argued for employing technology in higher education, particularly in writing classrooms (Alnasser, 2018; Burkhart et al., 2020; El Ebyary & Windeatt, 2017; Lachner & Neuburg, 2019). The areas that researchers have shifted their focus to include addressing writing instructors' perceptions regarding the integration of e-rating systems into their teaching (Le, 2021), comparing the correlation between TBF and CBF scores (Wang & Brown, 2007), analysing the quality of FB generated by computers (Powers et al., 2001), appraising the reliability and validity of electronic FB systems (Diki, 2006), formatively employing e-rating systems to measure their effectiveness in improving written texts produced by students (Coniam, 2009; Deane et al., 2011), and how technology can be used to summatively assess students' written texts (Rudner & Liang, 2002).

Vygotsky (1978) introduced the 'zone of proximal development' (ZPD) concept. This concept was advocated by numerous educationalists worldwide, leading them to encourage practices that stimulate such development. El Ebyary and Windeatt (2017) suggested that offering student writers CBF might enable them to move to the next learning zone, as described by Vygotsky (1978). Hyland and Hyland (2006) argued that FB can *scaffold* the learning process by offering more frequent learning opportunities and better experiences while generating multiple drafts of written texts. Therefore, it can be argued that FB generated by computers promotes the development of writing skills. As discussed earlier, studies on CBF have tackled different aspects, including the nature and quality of CBF and how writing instructors perceive this type of FB. However, how student writers perceive CBF's reliability in comparison with their perceptions of the reliability of TBF and PF remains under-investigated. In particular, this has not been investigated in the Saudi EFL context. The current study therefore investigated and compared how Saudi EFL learners perceived the reliability of the three types of FB in their written texts after being exposed to them.

III. METHOD

The current study was a quasi-experiment in the Saudi EFL context. It explored Saudi students' perceptions of the reliability of TBF, PF and CBF and compared them to one another. We administered a pre-intervention questionnaire to both a control group and an experimental group. After the intervention, we administered a post-intervention questionnaire to the experimental group only. The research questions addressed in this study were as follows:

RQ 1: How do Saudi EFL learners perceive the reliability of TBF, PF and CBF?
RQ2: Which of the three FB types do Saudi EFL learners find the most and least reliable?

A. Study Sample

The study was conducted in a higher education English department in Saudi Arabia that offers BA, MA, and PhD programmes in English language-related fields. The participants were male Saudi BA learners. Their study programme offered five compulsory writing courses. The researcher took over the teaching of a level 3 writing course (year 2 of the programme) that comprised the experimental group. A different group of students from the same course that was taught

by a different instructor was used for data collection (the control group). Prior to this course, the participants had attended two writing courses in the same programme. The experimental group (taught by the researcher) consisted of 21 students, and the control group consisted of 19 students (a total of 40 students).

B. Instrument and Procedures

As mentioned earlier, a pre- and post-intervention questionnaire was administered. The questionnaire included an introductory section that explained the purpose of the study and provided key definitions. The first section enquired about their background regarding the three types of FB (TBF, PF and CBF). The second section provided 15 statements measuring the respondents' perceptions of the three types of FB (five statements each). A five-point Likert scale was adopted for these statements (*strongly agree, agree, not sure, disagree, strongly disagree)*. The questionnaire concluded with an open-ended section that allowed the participants to share further thoughts.

The data collection procedure started with an explanation of the purpose of the study and the expected procedures, and consent to participate in the study was obtained. Immediately after that, the pre-intervention questionnaires were administered to the two groups of students. Following the teaching curriculum, students in the experimental group were taught essay writing for two weeks, three hours per week. They were given exemplar essays to examine and had to develop two of their own essays. The researcher provided FB on these essays and required them to produce a final improved draft (one at a time). Students were then trained to provide PF, practice feedback provision and conduct FB conferences between themselves. Then, an automated system was introduced (Criterion, an ETS international educational service); participants were shown how to work with the system, how to submit essays and receive CBF and how to incorporate the generated FB. In the following weeks, the participants went through four cycles of essay writing, in which they developed multiple drafts of four essays. Each cycle started with the development of a first draft which was provided with PF. A second draft was then developed and submitted to the automated system. A final draft based on the FB generated by the automated system was then developed. After exposure to this treatment, a post-intervention questionnaire was administered to measure the differences, if any, in participants' perception.

IV. ANALYSIS AND RESULTS

This section presents the results obtained from the pre- and post-intervention questionnaires.

A. Survey Items

The introductory section of the pre-intervention questionnaire three items enquired concerning participants' previous experience with TBF, PF and CBF (Table 1). With regard to TBF, the majority reported receiving it from their instructors on a regular basis; specifically, 45% 'Sometimes' received it and 35% received it 'Often' (totalling 80%). This finding establishes that the majority of the participants were already familiar with TBF. With regard to PF, only 40% of the participants had received it; the larger proportion (60%) had not received it. This suggests that PF as a learning tool has been employed in the Saudi context, but not to a great extent, and that participants have partial awareness of the nature of the technique. Finally, the majority (85%) reported not receiving CBF in the past, suggesting unfamiliarity with the nature of CBF. In brief, the majority of participants in the study were very familiar with the nature of TBF, less familiar with PF, and unfamiliar with CBF.

TABLE 1
PARTICIPANTS' EXPERIENCE OF TBF AND CBF

TBF: How often did you receive TBF on your writing?		
Scale	Frequency	Percentage
Never	2	5.0
Rarely	6	15.0
Sometimes	18	45.0
Often	14	35.0
Total	**40**	100.0
PF: Have you received PF in the past?		
Scale	Frequency	Percentage
Yes	16	40.0
No	24	60.0
Total	**40**	100.0
CBF: Have you received automated FB in the past?		
Scale	Frequency	Percentage
Yes	6	15.0
No	34	85.0
Total	**40**	100.0

The second section of the pre-intervention questionnaire included 15 items divided into three themes, namely the reliability of the three types of feedback (TBF, PF and CBF). Under each theme, five identical items addressed aspects relevant to perceptions of how reliable each FB type was (Table 2). The five items were:

1- The reliability of the FB type (an overall statement).
2- Desire to avoid the type of FB.

3- Recommending the type of FB for writing classes.
4- The acceptance of the received FB.
5- The fairness of the FB type in evaluating learners' essays.

TABLE 2
PERCEPTIONS ON THE RELIABILITY OF TBF, PF AND CBF (PRE-QUESTIONNAIRE: RESPONSES OF THE TWO GROUPS)

Items	Mean (M)	Std. Deviation (SD)	N
TBF: 1 The FB provided by the instructor is reliable	4.3750	.58562	40
TBF: 2 I wish for my instructor to avoid providing FB on my texts	2.2250	.35061	40
TBF: 3 I recommend using TBF in writing classes	4.4750	.59861	40
TBF: 4 I will always use the FB I receive from my instructor	4.5000	.55470	40
TBF: 5 TBF is a fair way to evaluate my written texts	4.3000	.82275	40
PF: 1 The FB provided by my peers is reliable	2.2750	.96044	40
PF: 2 I wish for my peers to refrain from providing FB on my texts	3.2750	1.26060	40
PF: 3 I recommend using PF in writing classes	2.9750	1.20868	40
PF: 4 I will always use the feedback I receive from my peers	2.9000	1.15025	40
PF: 5 PF is a fair way to evaluate my written texts	3.0000	.96077	40
CBF: 1 The FB provided by the computer is reliable	3.6250	1.19158	40
CBF: 2 I wish for my instructor to avoid enabling computers to provide FB on my texts	2.5500	1.03651	40
CBF: 3 I recommend using CBF in writing classes	3.8250	1.08338	40
CBF: 4 I will always use the FB I receive from my computer	2.9250	1.04728	40
CBF: 5 CBF is a fair way to evaluate my written texts	3.6250	1.05460	40

The Reliability of the FB.

Participants' perceptions of the reliability of the three types of FB varied (Table 2). TBF was perceived to be the most reliable type of FB ($M = 4.37$ out of 5), which is an expected finding since the instructor has knowledge and experience in writing instruction and expertise in providing FB. PF was reported to be the least reliable type of FB ($M = 2.27$), possibly because of similar weaknesses to those reported in the literature regarding this technique. Interestingly, CBF was reported to be more reliable than PF ($M = 3.62$) even though participants had no previous experience with it. This suggests participants' interest in and acceptance of the integration of this type of FB into writing classes.

1. Desire to Avoid FB Type

With regard to which of the three types of FB the participants wished to avoid, the majority did not want to avoid TBF ($M = 2.22$; $SD = 0.35$), to a lesser extent the participants did not want to avoid CBF ($M = 2.55$; $SD = 1.03$), but were unsure about whether to avoid PF ($M = 3.27$; $SD = 1.26$). Further analysis showed that the standard deviations concerning PF and CBF were quite large, suggesting that there was a proportion of students who were not in agreement regarding the types of FB they wished to receive. The literature has suggested advantages for each type and has also raised concerns regarding each type, including concerns related to the reliability of, for example, PF. It is possible that the advantages and concerns of each type influenced participants' preferences, leading to such disagreements.

2. Recommending FB Types for Writing Classes

In terms of recommending each type of FB for future classes, TBF was recommended most often ($M = 4.47$), PF was recommended least often ($M = 2.97$), and CBF was recommended more than PF but less than TBF ($M = 3.82$). That participants perceive CBF to be more acceptable than PF is an interesting finding that possibly suggests that interaction with computers is easier and faster than with peers. The findings also suggest that TBF is perceived to be integral to writing classes owing to its reliable nature.

3. Acceptance of FB

If students use the FB they receive, it indicates that they find it valid and, therefore, reliable. The majority of the participants reported that they would use TBF that they receive ($M = 4.5$). They were hesitant to use PF ($M = 2.90$; $SD = 1.15$) and CBF ($M = 2.92$; $SD = 1.04$). Statistical analysis indicated that the standard deviations were large, suggesting disagreement regarding this notion. It may also suggest that there are different proportions of participants: those who wish to use it, those who do not wish to use it, and those who are unsure and wanting more practice before making a decision. In general, these findings indicate that when TBF is offered, learners will accept it as the primary type of FB for text improvement and other sources will possibly be marginalised.

4. The Fairness of the FB Type in Evaluating Learners' Essays

Regarding the fairness of the three FB types, the majority reported TBF as the fairest ($M = 4.3$), PF as the least fair ($M = 3.00$), and CBF as relatively fair ($M = 3.62$), but not to the extent of comparing CBF with TBF. It can be argued that fair FB is more likely to be accepted and incorporated into written text. In this regard, TBF was viewed as fairer than the other two types; therefore, it was more likely to be accepted by the participants (see earlier analysis). Additionally, these results in general concur with the results of previous studies, and a pattern emerges in which TBF is always ranked at the top, followed by CBF, and PF is always rated as the least valued.

Statistical analysis yielded few concerns, especially in relation to the large standard deviations relevant to some items. This called for a *post hoc* analysis, in which an in-depth analysis was conducted on individual responses, and a number

of patterns were observed. First, several participants highly recommended integrating CBF into writing classes while simultaneously expressing hesitance to use computer-generated FB. This may indicate their desire for innovative approaches in writing classes but not to the extent that they were willing to rely fully on this type of FB. A second pattern that was observed concerned participants who did not recommend PF; they reported that it was not fair and that they would not use it if it were offered to them. Concerns regarding the reliability of PF were commonly recorded throughout the data, which is in line with this pattern.

The post-intervention questionnaire included 10 items concerning only PF and CBF. TBF-related items were excluded because the participants were already familiar with their nature owing to their previous experiences (this is evident in their responses reflected in Table 1). For the analysis, the means of the pre- and post-intervention responses were compared using the Wilcoxon signed-rank test to investigate whether there were statistically significant differences in the responses after exposure to the intervention (Table 3). Among the ten items, the test yielded two statistically significant differences. First, concerning the use of CBF, the perception average value (item 4) was $M =$ 2.93; after the intervention, it increased to $M = 4$, with a difference between the two means of 1.07. The Wilcoxon test revealed that this difference was statistically significant, $\alpha = 0.002$. Second, the participants started off being relatively unsure about whether they wished to avoid CBF in writing classes ($M = 2.55$); after the treatment ($M = 1.71$), there was a statistically significant difference ($\alpha = 0.04$; with a mean difference of -0.84). The mean differences concerning the other items were not found to be significant; therefore, there was no need to elaborate on them (see Appendix). In general, these findings suggest that perceptions regarding the nature and reliability of CBF and its reliability can be enhanced with further exposure, a finding that may not apply to PF. In other words, learners may have more preference for automated rather than peer FB in writing classes, although TBF remains their first choice.

TABLE 3
COMPARISON OF MEANS BETWEEN THE EXPERIMENTAL GROUP'S PRE- AND POST-INTERVENTION RESPONSES REGARDING PF AND CBF

Wilcoxon Signed Ranks Test										
	Pre & Post: PF is reliable	Pre & Post: Peers refrain from providing FB	Pre & Post: Recommending PF in writing classes	Pre & Post: Using received PF	Pre & Post: fairness of PF	Pre & Post: CBF is reliable	Pre & Post: Avoid offering CBF	Pre & Post: Recommending CBF in writing classes	Pre & Post: Using received CBF	Pre & Post: Fairness of CBF
Z	-.072[b]	-.826[b]	-1.531[c]	-.525[c]	-1.032[c]	-.660[b]	-1.979[c]	-1.734[b]	-3.153[b]	-1.330[b]
Asymp. Sig. (2-tailed)	.942	.409	.126	.599	.302	.509	.048	.083	.002	.183
b. Based on negative ranks.										
c. Based on positive ranks.										

B. Open-ended Section

As mentioned earlier, the questionnaires included an open-ended section to allow participants to express their thoughts on the phenomena under investigation This section was optional. The pre-intervention responses showed that none of the 40 participants raised any concerns about the reliability of TBF; in fact, they found no weaknesses in it (reported by 18 participants). With regard to PF, 14 participants, 4 of whom were in the experimental group, viewed it as the most unreliable; the FB was described to be 'wrong', 'inaccurate', 'unreliable', 'difficult to understand', and so on. Seven participants, two of whom were from the experimental group, also reported CBF to be unreliable but to a much lesser degree. Although several advantages of this type of FB have been described (such as easy access, instantly received FB, and an interesting FB tool), seven participants raised concerns regarding its reliability and clarity. Overall, these findings suggest that participants had full confidence in the reliability of TBF, a lesser degree of confidence in the reliability of CBF, and partial confidence in the reliability of PF. Finally, after exposure to PF and CBF, only six participants raised concerns about the reliability of FB provided by their peers and no concerns were raised regarding CBF. The change in their views suggests that more exposure to these two types of FB might increase learners' concerns about PF and reduce their interest in CBF.

V. DISCUSSION AND CONCLUSION

In EFL contexts, practitioners commonly seek best practices in offering educational services concerning English teaching and learning. In these contexts, writing particular emphasis is placed on writing skills, leading many researchers to explore different aspects of developing writing skills (Latifi et al., 2021; Yu, 2021). A common practice for EFL writing instructors is to provide FB to their students on a regular basis, preferably on each draft that they produce. This requirement places a heavy load on the instructors' shoulders that is likely to lead to a reduction in the frequency with which FB is provided and limit learners' writing development. This calls for innovation in providing FB by utilising different types of FB, such as PF and CBF (Burkhart et al., 2020; Chang et al., 2017; El Ebyary & Windeatt, 2017; Lachner & Neuburg, 2019; Rollinson, 2005). Since neither PF nor CBF can match the quality of FB provided by the instructor, learners may question the reliability of these two sources. The literature advocates that reliable FB can lead to optimal learning (Ernst & Steinhauser, 2018), and thus it can be argued that positive perceptions regarding reliability may positively impact learning. However, negative perceptions may lead to refraining from deep involvement in the learning process. The current study aimed to investigate EFL learners' perceptions of the reliability of the three FB types, and the findings are clearly indicative of their perceptions. It was found that the participants viewed FB provided by the teacher as the most reliable. In addition, the findings suggest that learners cannot do without it, even in the presence of other alternatives such as PF and CBF. This finding concurs with that of Alnasser (2013), who explored whether PF and CBF can replace TBF, a notion rejected by that study's participants. Experienced language instructors have the expertise needed to offer explicit and reliable FB on written texts. This raises learners' confidence in the FB they receive from their instructors and, therefore, they tend to value and accept it. In this study, the majority of participants reported their willingness to accept and use TBF ($M = 4.50$), reflecting their confidence in their instructors. In contrast, the differences in the overall means in responses between TBF and PF, and TBF and CBF were not nearly comparable, as the differences ranged from 0.81 to 1.6 (with the higher values pertaining to TBF; see Table 2 and Appendix). Nonetheless, CBF scored higher than PF in terms of reliability, fairness and employment in future classes. Not only is CBF perceived as better than PF, but a statistically significant shift in participants' responses was found after exposure to CBF in that they were willing to use more CBF in their writing and desired more practice with the automated system. No statistically significant changes were found with regard to PF after participants were exposed to it (see Appendix). These findings are supported by the open-ended sections, where concerns were raised more frequently before practice with CBF and PF, and significantly reduced after exposure to these two types of FB. This may indicate that greater exposure to these types of FB can positively impact EFL learners' perceptions of them.

These findings have pedagogical implications for Saudi Arabia and other EFL contexts. The primary implication is that teacher involvement in providing FB is integral because EFL learners find it to be the most reliable type of information they will ever have. TBF will always provide confidence and comfort to learners in the learning process; therefore, teachers should not limit their FB in writing classes. Of course, such a degree of reliance on this type of FB may dissuade learners from utilising other sources; therefore, teachers need to integrate other types of FB without creating a sense that they may replace TBF. Additionally, if a teacher has the choice of integrating either CBF or PF into a writing class, CBF is recommended as it was seen as more reliable and learners raised fewer concerns about it. Automated systems can be attractive and accurate, and generate instant FB which can be quite supportive to the teacher (Deane et al., 2011; Le, 2021). Teachers are encouraged to have their students submit their texts to automated systems to produce an improved version on which TBF can then be provided. This process can alleviate the teachers' FB-related burdens and hence enable them to provide more TBF. Finally, the literature suggests that CBF can positively impact learning; the current study found that the more learners are exposed to this type of FB, the more positive their perceptions of it will become. Therefore, considering the rapid development in technology, it is advisable to emphasise CBF in writing classes and to enable learners by providing unlimited access to such systems as an encouragement for learning autonomy and writing skills development.

A limitation of this study is that an analysis of the reliability of the written FB generated by computers and students was beyond its scope. Thus, researchers are encouraged to explore this area and study the nature of FB generated by these two techniques, especially the automated one, because it is a relatively new tool in writing classes. Additionally, further and thorough investigations are needed to answer the question of why EFL learners were hesitant to deem CBF as reliable and yet wanted to work with it in writing classes. Insights in this regard improve the utility of this tool and, therefore, improve the learning experience.

APPENDIX

TABLE 4
MEANS OF PRE- & POST RESPONSES OF THE EXPERIMENTAL GROUP (PF & CBF)

Descriptive Statistics (PF & CBF)					
Pre & Post Items	**N**	**Mean**	**Std. Deviation**	**Minimum**	**Maximum**
Pre: 1 The FB provided by my peers is reliable	40	2.28	.960	1	5
Pre: 2 I wish for my peers to refrain from providing FB on my texts	40	3.28	1.261	1	5
Pre: 3 I recommend using PF in writing classes	40	2.98	1.209	1	5
Pre: 4 I always use the feedback I receive from my peers	40	2.90	1.150	1	5
Pre: 5 PF is a fair way to evaluate my written texts	40	3.0000	.96077	1	5
Pre: 1 The FB provided by the computer is reliable	40	3.63	1.192	1	5
Pre: 2 I wish for my instructor to avoid enabling computers to provide FB on my texts	40	2.55	1.037	1	5
Pre: 3 I recommend using CBF in writing classes	40	3.83	1.083	1	5
Pre: 4 I will always use the FB I receive from my computer	40	2.93	1.047	1	5
Pre: 5 CBF is a fair way to evaluate my written texts	40	3.62	1.055	1	5
Post: 1 The FB provided by my peers is reliable	21	2.38	1.244	1	4
Post: 2 I wish for my peers to refrain from providing FB on my texts	21	3.1905	1.53685	1	5
Post: 3 I recommend using PF in writing classes	21	2.38	1.465	1	5
Post: 4 I always use the feedback I receive from my peers	21	3.19	.814	2	5
Post: 5 PF is a fair way to evaluate my written texts	21	2.62	1.203	1	5
Post: 1 The FB provided by the computer is reliable	21	3.76	.768	2	5
Post: 2 I wish for my instructor to avoid enabling computers to provide FB on my texts	21	1.7143	.64365	1	3
Post: 3 I recommend using CBF in writing classes	21	3.90	.831	2	5
Post: 4 I will always use the FB I receive from my computer	21	4.00	.894	2	5
Post: 5 CBF is a fair way to evaluate my written texts	21	3.5714	1.02817	2	5

REFERENCES

[1] Alnasser, S. (2013). *A New Form of Peer Feedback Technique: An Investigation into the Impact of Focusing Saudi ESL Learners on Macro Level Writing Features*. Ph.D. Thesis. Newcastle University.
[2] Alnasser, S. M. N. (2018). Exploring Student-Writers' Views on Replacing Teacher Feedback with Peer Feedback and Computer-Based Feedback. *Arab World English Journal*, *9*(3), 345-366.
[3] Alzahrani, M., & O'Toole, J. (2017). The Impact of Internet Experience and Attitude on Student Preference for Blended Learning. *Journal of Curriculum and Teaching*, *6*(1), 65-78. https://doi.org/10.5430/jct.v6n1p65
[4] Bitchener, J., & Ferris, D. (2012). *Written Corrective Feedback in Second Language Acquisition and Writing*. New York: Routledge.
[5] Brown, W., Lovett, M., Bajzek, D., & Burnette, J. (2006). *Improving the Feedback Cycle to Improve Learning in Introductory Biology Using the Digital Dashboard*. HI, USA.
[6] Burkhart, C., Lachner, A., & Nückles, M. (2020). Assisting Students' Writing with Computer-Based Concept Map Feedback: A Validation Study of the CohViz Feedback System. *PLOS ONE*, *15*(6), e0235209. https://doi.org/10.1371/journal.pone.0235209
[7] Chang, Y., Lee, C., Chen, C., Liao, C., Ng, C., Chen, J., & Chaou, C. (2017). Exploring the Influence of Gender, Seniority and Specialty on Paper and Computer-Based Feedback Provision During Mini-CEX Assessments in a Busy Emergency Department. *Advances in Health Sciences Education*, *22*(1), 57-67. DOI: 10.1007/s10459-016-9682-9
[8] Chang, H., & Windeatt, S. (2021). Designing and Applying a Moodle-Based E-Textbook for an Academic Writing Course. *International Journal of Mobile and Blended Learning*, *13*(2), 73-95.
[9] Chen, J., White, S., McCloskey, M., Soroui, J., & Chun, Y. (2011). Effects of Computer Versus Paper Administration of an Adult Functional Writing Assessment. *Assessing Writing*, *16*(1), 49-71. https://doi.org/10.1016/j.asw.2010.11.001
[10] Cheung, A., & Slavin, R. (2012). How Features of Educational Technology Applications Affect Student Reading Outcomes: A Meta-Analysis. *Educational Research Review*, 7(3), 198-215. https://doi.org/10.1016/j.edurev.2012.05.002
[11] Cho, K., & Schunn, C. (2007). Scaffolded Writing and Rewriting in the Discipline: A Web-Based Reciprocal Peer Review System. *Computers and Education*, *48*(3), 409-426. https://doi.org/10.1016/j.compedu.2005.02.004
[12] Coniam, D. (2009). Experimenting with a Computer Essay-Scoring Program Based on ESL Student Writing Scripts. *ReCALL*, *21*(2), 259-279. https://doi.org/10.1017/S0958344009000147
[13] Cohen, A., & Cavalcanti, M. (1990). *Feedback on Compositions: Teacher and Student Verbal Reports*. Cambridge: Cambridge University Press.
[14] Dikli, S. (2006). An Overview of Automated Scoring of Essays. *Journal of Technology, Learning, and Assessment*, *5*(1), 1-36.
[15] Deane, P., Quinlan, T., & Kostin, I. (2011). Automated Scoring Within a Developmental, Cognitive Model of Writing Proficiency. *ETS Research Report Series, 1*, i-93. doi: 10.1002/j.2333-8504.2011.tb02252.x.
[16] El Ebyary, K., & Windeatt, S. (2010). The Impact of Computer-Based Feedback on Students' Written Work. *International Journal of English Studies*, *10*(2), 121-142. https://doi.org/10.6018/ijes/2010/2/119231
[17] El Ebyary, K., & Windeatt, S. (2017). Eye Tracking Analysis of EAP Student's Regions of Interest in Computer-Based Feedback on Grammar, Usage, Mechanics, Style and Organization and Development. *Occasional Papers in the Development of English Education*, *63*(1), 5-30. DOI: 10.21608/OPDE.2017.87705

[18] Ernst B. & Steinhauser M. (2018). Effects of Feedback Reliability on feedback-Related Brain Activity: A feedback valuation Account. *Cognitive, Affective, & Behavioural Neuroscience*, *18*, 596-608. https://doi.org/10.3758/s13415-018-0591-7

[19] Ferris, D. (1995). Student Reactions to Teacher Response in Multiple-Draft Composition Classrooms. *TESOL Quarterly*, *29*(1), 33-53. https://doi.org/10.2307/3587804

[20] Ferris, D., & Roberts, B. (2001). Error Feedback in L2 Writing Classes? *Journal of Second Language Writing*, *10*(3), 161-184. https://doi.org/10.1016/S1060-3743(01)00039-X

[21] Gibbs, G., & Simpson, C. (2002). *How Assessment Influences Student Learning: A Conceptual Overview*. CHEP: The Open University.

[22] Gibbs, G., & Simpson, C. (2004). Conditions Under Which Assessment Supports Student Learning. *Learning and Teaching in Higher Education*, *1*(1), 3-31.

[23] Gomez, R., Parker, R., Lara-Alecio, R., & Gomez, L. (1996). Process Versus Product Writing with Limited English Proficient Students. *Bilingual Research Journal*, *20*(2), 209-233. https://doi.org/10.1080/15235882.1996.10668628

[24] Grabe, W., & Kaplan, R. P. (1996). *Theory and Practice of Writing: An Applied Linguistic Perspective*. London: Longman.

[25] Grimes, D., & Warschauer, M. (2010). Utility in a Fallible Tool: A Multi-Site Case Study of Automated Writing Evaluation. *Journal of Technology, Learning, and Assessment*, *8*(6), 1-43.

[26] Haigh, M. (2007). Sustaining Learning Through Assessment: An Evaluation of the Value of a Weekly Class Quiz. *Assessment and Evaluation in Higher Education, 32*(4), 457-474. https://doi.org/10.1080/02602930600898593

[27] Helfaya, A. (2019). Assessing the Use of Computer-Based Assessment-Feedback in Teaching Digital Accountants. *Accounting Education*, *28*(1), 69-99. https://doi.org/10.1080/09639284.2018.1501716

[28] Hoq, M. (2020). E-Learning During the Period of Pandemic (COVID-19) in the Kingdom of Saudi Arabia: An Empirical Study. *American Journal of Educational Research*, *8*(7), 457-464. doi:10.12691/education-8-7-2.

[29] Hu, G. (2005). Using Peer Review with Chinese ESL Student Writers. *Language Teaching Research*, *9*(3), 321-342. https://doi.org/10.1191/1362168805lr169oa

[30] Huxham, M. (2007). Fast and Effective Feedback: Are Model Answers the Answer? *Assessment and Evaluation in Higher Education*, *32*(6), 601-611. https://doi.org/10.1080/02602930601116946

[31] Hyland, K. (2003). *Second Language Writing*. Cambridge: Cambridge University Press.

[32] Hyland, K., & Hyland, F. (2006). *Interpersonal Aspects of Response: Constructing and Interpreting Teacher Written Feedback*. Cambridge: Cambridge University Press.

[33] Jarom, E., Woodruff, E., Bryson, M., & Lindsay, P. (1991). The Effects of Revising with a Word Processor on Writing Composition. *Research in the Teaching of English, 26,* 167-193.

[34] Lachner, A., & Neuburg, C. (2019). Learning by Writing Explanations: Computer-Based Feedback About the Explanatory Cohesion Enhances Students' Transfer. *Instructional Science*, *47*(1), 19-37. https://doi.org/10.1007/s11251-018-9470-4

[35] Latifi, S., Noroozi, O., Hatami, J. & Biemans, H. (2021). How Does Online Peer Feedback Improve Argumentative Essay Writing and Learning? *Innovations in Education and Teaching International. 58*(2), 195-206. https://doi.org/10.1080/14703297.2019.1687005

[36] Lee, I. (2007). Feedback in Hong Kong Secondary Writing Classrooms: Assessment for Learning or Assessment of Learning? *Assessing Writing, 12*(3), 180-198. https://doi.org/10.1016/j.asw.2008.02.003

[37] Leki, I. (1990). Potential Problems with Peer Responding in ESL Writing Classes. *CATESOL Journal*, *3*, 5-19.

[38] Li, J. (2006). The Mediation of Technology in ESL Writing and Its Implications for Writing Assessment. *Assessing Writing*, *11*(1), 5-21. https://doi.org/10.1016/j.asw.2005.09.001

[39] Li, Z. (2021). Teachers in Automated Writing Evaluation (AWE) System-Supported ESL writing classes: Perception, implementation, and influence. *System*, *99*, 1–14. https://doi.org/10.1016/j.system.2021.102505

[40] Lizzio, A., & Wilson, K. (2008). Feedback on Assessment: Students' Perceptions of Quality and Effectiveness. *Assessment and Evaluation in Higher Education, 33*(3), 263-275. https://doi.org/10.1080/02602930701292548

[41] McCutchen, D. (2011). From Novice to Expert: Implications of Language Skills and Writing Relevant Knowledge for Memory during the Development of Writing Skill. *Journal of Writing Research*, *3*(1), 51-68. http://dx.doi.org/10.17239/jowr-2011.03.01.3

[42] Miller, T. (2009). Formative Computer-Based Assessment in Higher Education: The Effectiveness of Feedback in Supporting Student Learning. *Assessment and Evaluation in Higher Education, 34*(2), 181-192. https://doi.org/10.1080/02602930801956075

[43] Min, H. (2008). Reviewer Stances and Writer Perceptions in EFL Peer Review Training. *English for Specific Purposes*, *27*(3), 285-305. https://doi.org/10.1016/j.esp.2008.02.002

[44] Mohamed, A. (2008). Effects of Active Learning Variants on Student Performance and Learning Perceptions. *International Journal for the Scholarship of Teaching and Learning*, *2*(2), 1-15. https://doi.org/10.20429/ijsotl.2008.020211

[45] Morgan, H. (2020). Best Practices for Implementing Remote Learning During a Pandemic. *The Clearing House*, *93*(3), 135-141. https://doi.org/10.1080/00098655.2020.1751480

[46] OECD (2005). *Formative Assessment: Improving Learning in Secondary Classrooms. Centre for Educational Research and Innovation.* Paris: OECD Publication Paris.

[47] Peterson, E., & Irving, S. (2008). Secondary School Students' Conceptions of Assessment and Feedback. *Learning and Instruction, 18*(3), 238-250. https://doi.org/10.1016/j.learninstruc.2007.05.001

[48] Powers, D., Burstein, J., Chodorow, M., Fowles, M., & Kukich, K. (2001). Stumping e-Rater: Challenging the Validity of Automated Essay Scoring. *Computers in Human Behavior*, *18*(2), 103-134. https://doi.org/10.1016/S0747-5632(01)00052-8

[49] Phuwichit, K. (2016). *A Study of Teacher Feedback on Peer Feedback in EFL Writing and Its Relation to Self-Regulation*. PhD Thesis. University of Southampton.

[50] Reid, J. (1997). *Responding to ESL Student Language Problems: Error Analysis and Revision Plans*. Boston: Heinle & Heinle.

[51] Rollinson, P. (2005). Using Peer Feedback in the ESL Writing Class. *ELT Journal*, *59*(1), 23-30. https://doi.org/10.1093/elt/cci003

[52] Rudner, L., & Liang, T. (2002). Automated Essay Scoring Using Bayes' Theorem. *Journal of Technology, Learning, and Assessment*, *1*(2), 1-22.

[53] Tang, G., & Thitecott, J. (1999). Peer Response in ESL Writing. *TESL Canada Journal*, *16*(2), 20-38. https://doi.org/10.18806/tesl.v16i2.716

[54] Tanveer, M., Bhaumik, A., Hassan, S., & U Haq, I. (2020). Covid-19 Pandemic, Outbreak Educational Sector and Students Online Learning in Saudi Arabia. *Journal of Entrepreneurship Education*, *23*(3), 1-14.

[55] Truscott, J., & Hsu, A. (2008). Error Correction, Revision, and Learning. *Journal of Second Language Writing*, *17*(4), 292-305. https://doi.org/10.1016/j.jslw.2008.05.003

[56] Van Steendam, E., Rijlaarsdam, G., Sercu, L., & Van den Bergh, H. (2010). The Effect of Instruction Type and Dyadic or Individual Emulation on the Quality of Higher-Order Peer Feedback in EFL. *Learning and Instruction*, *20*(4), 316-327. https://doi.org/10.1016/j.learninstruc.2009.08.009

[57] Vygotsky, L. (1978). *Mind in Society: Development of Higher Psychological Processes*. USA: Harvard University Press.

[58] Walker, S., & Patel, A. (2018). More than Skills: What Can Approaches to Digital Literacies Learn from Academic Literacies? *Journal of Learning and Teaching in Higher Education*, *1*(1), 93-100.

[59] Wang, J., & Brown, M. (2007). Automated Essay Scoring Versus Human Scoring: A Comparative Study. *Journal of Technology, Learning, and Assessment*, *6*(2), 1-29.

[60] Wei, H., & Chou, C. (2019). *Relationships Among College Learners' Online Learning Perceptions, Behaviors, and Achievements via the Self-Determination Theory Approach*. Toronto: AERA Annual Meeting Proceedings.

[61] Wei, H., & Chou, C. (2020). Online Learning Performance and Satisfaction: Do Perceptions and Readiness Matter? *Distance Education*, *41*(1), 48-69. https://doi.org/10.1080/01587919.2020.1724768

[62] Williams, J. (2002). Undergraduate Second Language Writers in The Writing Center. *Journal of Basic Writing*, *21* (2), pp. 73-91. https://www.jstor.org/stable/43744176, DOI: 10.37514/JBW-J.2002.21.2.06.

[63] Yang, M., Badger, R., & Yu, Z. (2006). A Comparative Study of Peer and Teacher Feedback in a Chinese EFL Writing Class. *Journal of Second Language Writing*, *15*(3), 179-200. https://doi.org/10.1016/j.jslw.2006.09.004

[64] Yu, S. (2021). Giving Genre-Based Peer Feedback in Academic Writing: Sources of Difficulties and Challenges. *Assessment & Evaluation in Higher Education*, *46*(1), 36-53. https://doi.org/10.1080/02602938.2020.1742872

[65] Zaini, A., & Mazdayasna, G. (2015). The Impact of Computer-Based Instruction on the Development of EFL Learners' Writing Skills. *Journal of Computer Assisted Learning*, *31*(6), 516-528. https://doi.org/10.1111/jcal.12100

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