

# Relationship between Learning Styles and Motivation for Higher Education in EFL Students

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**Abstract**—This article aimed to examine the relationship between learning styles and motivation for higher education in EFL students. To this end, a total of 90 EFL students from Shahrekord University were selected. The students answered two questionnaires. Students learning styles were determined by one of the questionnaire and students motivation for higher education was identified by the second questionnaire. The data analysis of the first questionnaire revealed that visual learning styles was major learning styles preferences. About the second questionnaire, mostly students have high motivation for higher education. The analysis with respect to the relationship between learning styles, and motivation for higher education revealed significant relationship. It is hoped that the finding add useful information to L2 research on learning styles, and pedagogically speaking, the findings of the study may have implication for students and EFL teachers.

**Index Terms**—learning styles, motivation, EFL

## I. INTRODUCTION

In recent years, the most important research effort and educational improvement is the focus on language learners rather than focus on language teaching methodology. Mainstream language teaching doesn't consider teaching method as the most important factor in determining the success or failure of language teaching and learning, any more (Richard & Rodger, 2001).

The case is that students in EFL context have difficulty in learning language. Because materials designers focus top-down skills in 11 and 12 educational materials, so students need tools to compensate the problem (Adams & Bruce, 1980).

Teachers can give the students these tools to learn a language proficiently by giving enough input, practice and metalinguistic awareness. Along with providing suitable tools, Mccarty (1999) says one of the most important initial tasks is the task of knowing students. Teacher is able to guess students need in English even by having little information. Teacher can decide to do some activities and avoid others. Also, student's individual learning styles and preferences, their past experiences in learning language, their linguistic attitudes, their personalities, perhaps even their view on life, are probably all quite different. It is this that teacher must take advantage of for making more precise decision in the process of learning.

Among the above factors which cause individual differences, learning styles are the most important one. According to Kirby (1984) the term learning styles was started to use when researchers tried to find the ways to match teaching methods and instructional materials to the need of each learner. There are different definitions for learning styles, each one focuses on different aspects. For example keffe (1979) defines Learning styles as "cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to learning environment" (p.4). Stewart and Felicetti (1992) define learning styles as those educational conditions under which a student is most likely to learn (p.5).

Dun and Dunn (1979 as cited in Reid ,1987) defines learning styles as "a term that describes the variations among learners in using one or more senses to understand, organize, and retain experience"(p.89), which is the base of this study.

Along with the change in scholar's views, current theories consist of the effect of self-efficacy, social conditions, attributions, classroom factors and provide a better understanding of the roles of goal (pintrich & schunk, 1996). Also numerous studies (clement, Dronyei & Nocls, 1994, olshatin, shohamy, kemp & chatow, 1990; pintrich, Roser, & Degroot, 1994; Wigzell&Al-Ansari; 1993) have found that teaching styles, teacher attitudes, means of assessment, materials, individual VS group work , and other classroom context effects influences not only achievement, but also many aspects of motivation.

Up to now Motivation field and the term itself has been the focus of many studies. One possible definition is "the extent to which certain stimuli, objects, or events affects the occurrence or non-occurrence of the behavior in question" (Usova and Gibson, 1986; cited in Crump, 1996, 5).

Motivation is probably one of the most important factors that educators can consider in order to enhance learning. Multitude theories have been investigated to explain motivation while each of these theories has considered some aspect of motivation. No single theory seems to adequately explain all human motivation. The fact is that human beings in general and students in particular are complex creatures with complex needs and desires. With regard to students, very little if any learning can occur unless students are motivated on a consistent basis.

Regarding the correlation between motivation and successful Language learning, Dornyei (1998, p.117) asserts that: Motivation provides the primary impetus to initiate learning foreign language and later the driving force to sustain the long and often tedious learning process". Individuals with the excellent abilities cannot reach long-term purposes, neither are good teaching and suitable curricula enough to guarantee students achievement without adequate motivation. On the other hand, high motivation can compensate for considerable limitation both in one's learning conditions and language aptitude.

## II. BACKGROUND TO THE STUDY

Nowadays, one of the main objectives in foreign language learning area is to enhance awareness about students' personal differences and their possible influence on the learning process and accordingly, on learning results. Beside, because of the effect of many learner variables on the process of language learning (Blair, 1982), the emphasis on the individual differences among learners is indeed relevant in modern language teaching and its related learning environments. The success of second language learning is due not only to cognitive factors but also to affective, personality, motivational, and demographic factors of the learners (Brown, 2000; Carrel et al, 1996), among which personality is of great importance (Carrell et al, 1996). According to Ackerman and Heggestad (1997) individual difference variables such as intelligence, personality, and vocational interests can be used to explain not only variance in academic performance, but also the processes by which traits influence examination outcomes.

Findings of researchers show that people learn more when they are aware of their learning styles (O'Connor, 1997). Moreover, the determination of learner's learning styles helps teachers and educational planners provide students necessary educational support and supplies (Anderson & Elloumi, 2004) because learning styles are influential factors in learners' learning. Studies about learning show that considering learning styles in planning and presenting education can improve learning processes meaningfully (Dwyer, 1998).

### **Frame work for learning style categorization**

According to Reid (1995) there are three major categories for learning styles: cognitive learning styles; sensory learning styles, and personality learning styles.

#### **Cognitive learning styles**

##### **Analytic Vs. Global**

Analytic learners see only parts and do not see their relationship the whole. They can see the forest for the tree. In learning a language they like concentrating on grammatical rules in detail. They are skillful in analyzing activities but, they are not good at communicative activities. (scarcella & oxford 1992).

Global learners like to have the whole picture of an idea. They are sociable. They are good at communicative activities. In language learning, they like to guess the meaning of a new word, to paraphrase, and they learn best through choral reading, recorded books, story writing, games, or group activities (scarcella & oxford 1992).

##### **Field –independent vs. Field –dependent**

There are differences in how people perceive separate items within a surrounding field. Field dependent learner are strongly influenced by the prevailing field, they see the forest. On the other hand field independent learners see items as more or less separate from the field, they see the tree within the forest. (witkin et al, 1977)

##### **Reflective Vs. impulsive**

Impulsive learners like to answer the question quickly. They are risk taker and concern need with speaking fluently, so make more mistakes. But reflective Learners need time to think about what they want to say or do. They are cautious and more concerned with accuracy, so make less mistakes. Reflective learners are often day dreaming, like to be quiet and start writing in the last minutes of the time limit (schmeck, 1988).

#### **Sensory learning styles**

According to Ried (1995) learning styles are divided into six main areas: visual, tactile, auditory, group, individual and kinesthetic.

Visual: visual learners store and remember fact and concepts that are associated with graphics and images. They prefer reading over listening. They have problem in understanding information which is given in lectures, conversations and oral mood without any visual support. In contrast, auditory learners prefer oral mood, they like sounds and use their more than others. They prefer to learn through lecture, discussion, talking and listening. Also they like to listen to recorded books. Kinesthetic learner prefers to learn by touching thing, through experience and doing rather than listening or reading. They remember actions rather than words. According to scarcella (1990), they like movement and frequent break. They also like to involve all of their body in learning. Teaching to other classmate and using flashcard is enjoyable for them. Tactile learners, like to touch and manipulate during learning so, laboratory could be a good academic situation for them. They prefer personal connections to topic and following directions they have written the selves.

### **Personality learning styles**

#### **Extroverted VS. Introverted**

According to Wilt and Heaven (1989) extrovert learners are sociable, talkative, assertive and full of energy. They search social stimulation and opportunities to engage others. They, also have positive attitude towards life. These kinds of individuals are good at leadership behavior. High levels of extraversion can be particularly well suited to jobs that require a great deal of interaction with other people. For example, teaching, marketing, sales, politics and public relations. In contrast, introverts like to be quiet, reserved and less involved in social situation. They seek energy and ideas from internal sources such as brain storming, personal reflection and theoretical exploration.

Before starting and kind of activities, they prefer to think about it, to work alone and enjoy solitary studying. They are good at jobs like writing, computer programming, engineering and accounting.

#### **Intuitive-random VS. Sensing –sequential**

According to Leanmont (1997) intuitive learners enjoy dealing with ideas and possibilities and potential outcomes. They like abstract thinking and imagining the future. Also they like innovation and dislike repetition, memorization and routine calculation. Besides, they prefer to guide their own learning.

In contrast, sensing learners enjoy dealing with facts and hands-on (laboratory) work. They like solve problem by considering specific methods and formula and dislike complication, surprise and courses that have no clear connection to the real world. Also, they prefer to receive guidance and specific instruction from the teacher.

#### **Closure-oriented/Judging VS. Open/perceiving**

Closure-oriented students are fast decision makers. They like to be structured and organized. They also plan activities schedules very carefully. Besides, they finish their job before deadline and avoid last-minute stresses i.e., they treat assignment seriously.

In contrast, perceiving learner postpone actions and decisions until last minutes to gather more information. They prefer to keep their options open. They work at many things at once in flexible ways. They feel energized by last minute pressures and often do their best work under pressure. (Phillips and Peters, 1999)

#### **Thinking VS. feeling**

Thinking learner tends to complete their work in an organized and efficient manner. They are results oriented, preferring doing something rather than talking about it. They need to be active, to be doing, to see tangible results from their work, and to be in control of the task. They think in terms of cause and effects and prefer right or wrong questions to open ended or interpretive ones (Silver and Hanson, 1996). In comparison feeling learners base their work and decisions on immediate feeling. They are in harmony with their own emotion and those of other people. They like group work and generate excitement and enthusiasm in group settings. They show empathy and compassion not only through behaviors, but also through words.

Reid (1987) showed that ESL students had significant variation in their sensory preferences, with people from specific cultures differentially favoring the three different modalities for learning. Students from Asian cultures, for instance, were often highly visual, with Koreans being the most visual. Many studies, including Reid's, found that Hispanic learners were mostly auditory. Reid discovered that Japanese are very non auditory. From a variety of cultures ESL learners were tactile and kinesthetic in their sensory preference.

VAK theory is considered to be one of the classical learning theories in the educational field, it is best known as VAKT, visual (V), auditory (A), kinesthetic (K) and tactile (T) (Mackay, 2007). Dunegan (2008) noted that the first development of VAK was in 1920, by psychologists and teaching specialists such as Fernald, Keller, Orton, Gillingham, Stillman and Montessori. The Federal Aviation Administration (2009) outlined that a VAK learning style is based on the student receiving vision, hearing and touch. Miller (2001) described a VAK learning style as the perceptual, instructional preference model which classifies learners by sensory preferences. The Intel Corporation (2007) reported that this theory has proven to be a popular and simple way to identify different learning styles. Dreeben (2010) suggested that the practical mode of VAK assessment, which includes asking learners about the way they receive information, is a strong reason for using it in the educational field. Byrnes (2010) stated that "the VAK model can be utilized to assist in incorporating different learning techniques into classroom instruction and activities" (p. 4). Mackay (2007) proposed that according to the VAK learning style, most people have a leading learning style that may be aligned with other preferences. A study conducted by Willis and Hodson (1999) using the VAK theory determined that 29% of elementary and high school learners are visual learners, 34% are auditory, and the remaining 37% are kinesthetic learners. Similarly, a study by Lisle (2007) used a VAK learning model in determining the learning style preferences of adults who experience learning difficulties. The study showed that (34%) participants preferred a visual style, which was an equal proportion to those who prefer an auditory style (34%). Of the remaining students, (23%) were kinesthetic learners and (9%) had multimodal learning style preferences. These results concluded in the studies of Hodson (1999) and Lisle (2007) based on VAK theory. The result showed most of the learners preferred visual and auditory learning, and that younger learners prefer kinesthetic more than adult learners.

According to Homayoni and Abdollahi (2003) there was a significant and positive correlation between cognitive styles and the academic achievement of students in English language and Mathematics. Abdollahpour, Kadivar, and Abdollahi, (2005), found that field independent learners had significant surpass in Mathematics and they used metacognitive and cognitive strategies. However, Shams Esfandabadi and Emami-pour (2003) didn't find a significant

difference between learning styles and academic achievement. In their study, female students had verbal and sequential learning style and the male ones had visual and general learning style.

Hlawaty (2008) compared three academic achievement groups (low achievers, high achievers and gifted) and learning styles based on Dunn and Dunn learning style theory. The MANOVA identified significant differences between the three academic achievement groups. Furthermore, the MANOVA result showed significant differences among all three pair-wise combinations of the achievement groups. The study reported that gifted students were less parent and teacher motivated while high and average students were more mobile, and low achievement students were more authority and teacher-oriented. Jackson- Allen and Chirstenberry (1994) conducted a study to compare the learning style preferences of low achieving African – American male students with those who were high achieving. The study selected 131 freshmen and 96 sophomores from grades 9 to 12 at a southern urban high school. The study divided students according to the average marks of students in core academic courses (English, science, history and mathematics). Students with an average below 70 were considered as low achieving and those with an average above 80 were considered as high achieving. A Dunn and Dunn learning styles inventory was conducted to determine students learning style. A t- test was conducted to examine the differences between low and high achieving auditory, visual, tactile, and kinesthetic learning styles. The t-test results showed no statistically significant differences ( $p .05$ ) between the two groups on auditory, visual, tactile, and kinesthetic elements of learning styles whereas motivation, mobility and parent motivated factors showed significant differences at the .1 level. The post hoc analysis indicated that students in low achieving groups were less self-motivated than high achieving groups, Furthermore, low achieving students needed a more active involvement in their learning experiences and they had less desire for academic achievement.

Park (1997) found significant differences among high achieving, middle achieving and low achieving students based on a Reid learning style questionnaire. The researcher used a preference mean of 18 and above = major, 16.50 and above = minor and 16.49 or less = a negative preference. The study found a statistically significant relationship between academic groups and learning styles. Furthermore, he observed that students from high and middle achieving groups preferred an auditory learning style whilst the low achieving group had only a minor preference for auditory learning. For a visual learning style the high and middle achieving group had minor preferences whereas the low achieving group had a negative preference. The low achieving group preferred learning in a group style while the high achieving group had a negative preference for this style. The high achieving group had a major preference for an individual learning style; while the low achieving group had a negative preference for the individual learning style. He concluded that “high achievers appear to have multiple learning styles preferences”.

#### **Research Question:**

1. What is the relationship between different learning styles and motivation for higher education?

#### **Research Hypothesis:**

- H01. There is no significant relationship between different learning styles and motivation for higher education.

### **III. METHODOLOGY**

#### **A. Participants**

A total of 90 Iranian EFL students at Shahrekord University majoring in English Translation participated in this study; based on Oxford Placement Test the students selected for this study were of intermediate level. The number of the females was more than the males students (65 female students and 25 Male students), because there were more female students in the university and the questionnaires were distributed to the whole class.

All the participants were native speakers of Persian and their age ranged between 19-32 years. They were randomly selected then, they were ranked base on oxford placement Test.

#### **B. Instruments**

##### **Motivational questionnaire**

This questionnaire consists of 32 items concerning students' motivation for higher education designed by Rabie (2011). It is in the form of a five –point likert scale ,ranging from (1)strongly agree to (5)strongly disagree .Rabie (2011)developed this questionnaire on the basis of insights from the related (literature review and the results of a pilot study .In a addition, some items were taken with a few modification from the questionnaire used by Tae (2000). According to Rabie (2011), the content validity of the questionnaire was an assured based on the judgment and a careful and critical examination of the items. Regarding the construct validity of the questionnaire, Rabie (2011) used factor analysis and found the construct and internal validity acceptable .The reliability index for the whole questionnaire were also satisfactory. This test was piloted with some other 40 English students before it was administered to the participants of this study. Its reliability has been proven ( $r=0.65$ ).

##### **Perceptual Learning style Preference Questionnaire**

The Perceptual Learning Style Preference Questionnaire (PLSPQ) which was developed by Reid (1987) was used in this study. This instrument is a self-reporting questionnaire which was developed on the basis of existing learning style instruments with some changes suggested by US consultants and non-native speaker informants in the field of linguistics. This questionnaire, which was designed and validated for non-native speakers, include five statements on each of the six learning style preferences to be measured: auditory, visual, kinesthetic, tactile, group learning, and

individual learning. The first four categories constitute the perceptual learning style categories and the remaining two make up the social strategy. The students answered on the basis of a five point Likert scale, ranging from strongly agrees to strongly disagree.

### C. Procedures

Sophomore EFL students in state University of Shahrekord were taken OPT to check their proficiency level at the beginning of the semester. One week later students were taken learning style test to check the kind of their learning style and motivational questionnaire was used for determining EFL students' motivation for higher education.

## IV. DATA ANALYSIS

To statistically verify the research hypothesis, the collected data underwent the statistical analysis of variance one-way ANOVA.

The research question of the current study intended to see if there was any significant relationship between learning styles and motivation for higher education in Iranian EFL students. A Pearson correlation was run to investigate the correlation between mentioned variables. Table 1 reports the results.

TABLE 1:  
CORRELATION BETWEEN LEARNING STYLES AND MOTIVATION FOR HIGHER EDUCATION IN IRANIAN EFL STUDENTS.

Variable	Correlation	Sig	Number
Learning styles & motivation	0.59	0.000	90
Visual	0.69	0.000	90
Tactile	0.37	0.001	90
Auditory	0.41	0.000	90
Group	0.55	0.03	90
Kinesthetic	0.47	0.000	90
Individual	0.25	0.04	90

As demonstrated in table 4.3 the highest correlation belong to visual learning style, that is students with visual learning style have more motivation for higher education. As the table 1 shows there is a significant relationship ( $p$  ) between learning styles and motivation for higher education.

## V. DISCUSSION AND CONCLUSION

The research question of the current study intended to see if there was any significant relationship between learning styles and motivation for higher education in Iranian EFL students. The following null hypothesis was formulated based on the first question of this study:

H01. There is no relationship between different learning style and motivation for higher education.

To answer the question, the analysis results show that, there is a significant relationship between learning styles and motivation for higher education. As the results show, the highest correlation belong to visual learning styles that is, visual learners have more motivation for higher education. Because according to Ried (1995) visual learners prefer reading over other skills, so they could study large volume of books which is necessary for higher education. Therefore based on the obtained results the null hypothesis was rejected.

In this study, the relationship between learning styles and motivation for higher education was investigated. Results of the study showed that Iranian EFL learners participated in this study had high motivation for higher education.

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