

Social and Emotional Intelligences: Empirical and Theoretical Relationship

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Abstract—This study aimed to explore the relationship between social and emotional intelligences. To this end, Reading the Mind in the Eyes Test (RMET) was translated into Persian and employed as a measure of social intelligence. It was then administered along with the Persian Emotional Intelligence Scale (EQS) to one hundred eighty one students majoring in English language and literature, translating English to Persian and teaching English as a foreign language at undergraduate and graduate levels at three universities in Mashhad, Iran. The correlational analysis of the participants' responses on the RMET and EQS revealed no significant relationship between social and emotional intelligences. The same analysis, however, showed that social intelligence is significantly related to four out of fifteen genera constituting the domain of emotional intelligence, i.e., Self-Aware, Humanistic, Sociable, and Self-Satisfying. The results are discussed from empirical and theoretical perspectives and suggestions are made for future research.

Index Terms—social intelligence, emotional intelligence, schema theory, translation

I. INTRODUCTION

From the perspective of schema theory, concepts represented by words such as “intelligence” have been approached either macrostructurally or microstructurally. The former which is widely adopted by almost all scholars and quoted by their followers defines them deductively in single-statement definitions such as the ability to judge, understand and reason well (Binet, 1905) or “the ability to solve problems or fashion products that are of consequence in a particular cultural setting or community” (Gardner, 1993, p. 6). By their very nature the words for which these definitions are offered place themselves at the apex of a hierarchical system and evade being tested due to their broad and vague nature.

The microstructural approach of schema theory, however, focuses on the words constituting the definition, studies them inductively and then decides whether they represent what they define. While Gardner himself, for example, followed the macrostructural approach of schema theory and did not develop any measure to establish the validity of proposed multiple intelligences (MIs), some of his followers did.

Shearer (1994), for example, designed the Multiple Intelligences Developmental Assessment Scales (MIDAS) consisting of eight scales to address the intelligences identified by Gardner (1983), i.e., naturalist, interpersonal, linguistic, intrapersonal, logical-math, spatial, kinesthetic, and musical. Other scholars expanded the list of intelligences by developing scales for cultural intelligence (e.g., Ang *et al.*, 2007), emotional intelligence (e.g., Mayer, Caruso & Salovey, 2000) social intelligence (e.g., Cantor & Kihlstrom, 1987) and spiritual intelligence (e.g., Amram & Dryer, 2007), to name a few.

Among the MIs identified and investigated so far, the 133-item Emotional Quotient Inventory (EQ-i) designed by Bar-On (1997) and Reading the Mind in the Eyes Test (RMET) developed by Baron-Cohen *et al.* (2001) have been validated microstructurally by Khodadady and Tabriz (2012) and Khodadady and Namaghi (2043), respectively. By building on these studies, the present project attempts to find out whether the emotional and social intelligences of university students majoring in English language and literature (ELL), translating English to Persian (TEP) and teaching English as a foreign language (TEFL) relate to each other significantly.

A. Emotional Intelligence

Emotional intelligence (EQ) has been defined macrostructurally by a number of scholars (e.g., Goleman, 1998; Mayer & Salovey 1997; Mayer, Salovey, & Caruso, 2002). Bar-On *et al.* (2003), for example, defined it as “an array of emotional and *social* [italics added] abilities, competencies and skills that enable individuals to cope with daily demands and be more effective in their personal and social life” (p. 1790). This definition is macrostructural because it assumes the existence of five competences, i.e., Adaptability, General Mood, Interpersonal,

Intrapersonal and Stress Management, and 15 components, i.e., Flexibility, Problem Solving, Reality Testing, Happiness, Optimism, Empathy, Interpersonal Relationships, Social Responsibility, Assertiveness, Emotional Self-Awareness, Independence, Self-Actualization, Self-Regard, Impulse Control, and Stress Tolerance, to be adopted universally.

Khodadady and Tabriz (2012) [henceforth K&T], however, questioned the validity of five competencies and 15 components by arguing that Bar-On (1997) had included 15 statements, i.e., 5, 12, 25, 34, 41, 50, 57, 65, 71, 79, 94, 101, 109, 115 and 123 to assess positive impression (PI) scale, negative impression (NI) scale, and inconsistency index (II). They argued that these statements were irrelevant to the construct under investigation. K&T removed these items and reduced their number from 133 to 117. They also rendered the 63 reverse statements of the EQ-i positive arguing that application of reverse statements is questionable because an EQ scale is designed to measure the existence of a construct rather than its non-existence.

K&T studied Dehshiry's (2003) Persian translation of 117 positive statements and revised them by resorting to schema theory as suggested by Khodadady (2001, 2008) and Khodadady and Lagzian (2013). In order to differentiate K&T's 117-statement scale from that of 133-item EQ-i, it is named EQS in this study. K&T administered the EQS to 669 instructors of English as a foreign language (EFL) and extracted 15 latent variables (LVs) when they applied the Principal Axis Factoring to their data and rotated their extracted factors. The LVs will be described in the instrumentation section very shortly.

B. Social Intelligence

Social intelligence has been defined macrostructurally as "the ability to understand and manage men and women, boys and girls-to act wisely in human relations" (Thorndike, 1920, p.228) and "facility in dealing with human beings" (Wechsler, 1958, p. 8). It has been translated into several scales such as George Washington Social Intelligence Test (Moss *et al.*, 1955), Social Insight Test (Chapin, 1942), the Role-Taking Test (Feffer, 1959) and Reading the Mind in the Eyes Test (RMET) developed by Baron-Cohen, Wheelwright, Hill, Raste, and Plumb (2001) [henceforth BWHR&P] and employed in this study.

The RMET is based on a rationale called theory of mind (Premack & Woodruff, 1978). It is based on the assumption that people interact by identifying each others' mental states. According to BWHR&P, the theory is variously referred to as "mentalizing" (Morton, Frith & Leslie, 1991), "mind reading" (Whiten, 1991) and "social intelligence" (Baron-Cohen, *et al.*, 1997). Kodadady and Namaghi (2013) [henceforth K&N] employed the RMET as a measure of social intelligence defined as "the ability to decode others' mental states on the basis of observable information, such as facial expressions" (Sabbagh, Moulson, & Harkness, 2004, p. 1).

K&N administered the Persian RMET validated by Khorashad *et al.* (2014) with the cloze multiple choice item test (CMCIT) designed by Hale *et al.* (1988) as a measure of English language proficiency to 181 undergraduate university students of ELL and Theology and obtained a significant correlation between the two ($r = .27, p < .01$), indicating that there is a positive relationship between social intelligence and English language proficiency. No study has, however, explored the relationship between social intelligence as measured by the RMET and emotional intelligence as measured by the EQS so far. In addition to exploring the relationship, the Persian RMET was revised in this study to find out whether the revision yields better psychometrics.

II. METHODOLOGY

A. Participants

One hundred eighty one university students majoring in the three main subfields of English took part voluntarily in this study. While the majority ($n = 96, 53.0\%$) were majoring in ELL, 44 (24.3%) and 41 (22.7%) studied TEFL and TEP, respectively, as full time students at undergraduate ($n = 136, 75.1\%$) and graduate ($n = 45, 24.9\%$) levels at Ferdowsi University of Mashhad ($n = 97, 53.6\%$), Imam Reza ($n = 58, 32.0\%$) and Khayyam ($n = 26, 14.4\%$) universities in Mashhad. Most participants were female in gender ($n = 126, 69.6\%$) and single in terms of marital status ($n = 153, 84.5\%$). Their age ranged between 18 and 39 (mean = 22.27, SD = 4.1). They spoke Persian ($n = 180, 99.4\%$) and Turkish ($n = 1, .6\%$) as their mother language.

B. Instruments

Three instruments were employed in the present study: A Demographic Scale, Reading the Mind in the Eyes Test and Emotional Intelligence Scale.

1. Demographic Scale

Following Khodadady and Dastgahian (2015) a Demographic Scale (DS) consisting of nine short-answer and multiple choice items were developed to collect the data related to participants' age, place, field, degree and year of study, and mother language. The questions dealing with these variables were raised on the answer sheet requiring the participants to mark the 36 boxes corresponding to the items brought up on the Persian RMET.

2. Reading the Mind in the Eyes Test

The Persian version of 36-item Reading the Mind in the Eyes Test (RMET) validated by Khorashad *et al.* (2014) was revised and administered in this study. Along with the test, a word definition handout was given to test takers to look up whatever words used in the four alternatives of the test if they did not know their meanings. The handout in the original English version contained 93 words presented alphabetically. The word "accusing", for example, was given as the first schema followed by its definition "blaming". It was then contextualized through **bold** fonts within a sentence such as "The policeman was **accusing** the man of stealing a wallet".

K&N employed the Persian version of the RMET translated by Khorashad (2013) and Khorashad et al. (2014). Instead of 93 words, it contained 25 in its word definition section. They were defined and presented in sentences whose content had been slightly altered to suit their intended Persian takers. The word “jealous”, for example, was translated as HASSOOD and contextualized in the Persian sentence “ALIREZA BE HAMEYEH PESSARHAE KE AZ OO BOLOND TAR VA KHOSH GHIYAFEHTAR BOODAND HASOODI MIKARD”. In this study, however, the original English RMET was translated by resorting to schema theory and its deficiencies were removed by consulting *Multiple Choice Items in Testing: Practice and Theory* (Khodadady, 1999). The processes of translation and revision will be described in some details in the Procedures section shortly.

The original English version of the RMET requires its takers to choose and circle the most suitable alternative on the test booklet as quickly as possible. In this study this procedure was changed to render the test cost effective. The four alternatives of items on the RMET were numbered alphabetically as A, B, C, and D, and the participants were provided with a single answer sheet to mark their answers on, allowing the researchers to administer the test booklets over and over. The participants were advised to look at each photo carefully and choose one of the alternatives which they thought described the mental state of the person photographed best. Upon choosing the best answer, they had to mark the box corresponding to their answer on the answer sheet. They were also advised to choose their answers as quickly as they could. They were not, however, timed. They had to, for example, choose the most suitable alternative provided on the top and bottom corners of the photo given in Figure 1 as a practice item in which the area around the eyes of a “panicked” man is presented. The alpha reliability coefficient reported by K&N was .54, indicating that the RMET is a relatively reliable measure of social intelligence.



Figure 1. Practice Item on the RMET

3. Emotional Intelligence Scale

The Persian Emotional Intelligence Scale (EQS) validated by K&T in Iran was employed in this study. It consists of 117 positively worded statements taken from the 133-item Emotional Quotient Inventory (EQ-I) designed by Bar-On (1997). The content validity of statements was established by K&T who resorted to schema theory to revise Dehshiry's (2003) translation of those statements. Each statement is offered on a 5-point Likert scale, i.e., never, seldom, sometimes, usually, and always true of me. The test takers are required to read each statement such as “I avoid hurting other people's feelings”, and decide to what extent it is true of them at the time they take the scale. With the exception of five statements, the rest loaded acceptably on fifteen LVs in K&T's study, i.e., Humanistic, Self-Satisfying, Self-Confident, Self-Aware, Self-Controlled, Research-Oriented, Content, Sociable, Empathetic, Tolerant, Flexible, Realistic, Independent, Emotional and Happy. While the EQS proved to be a highly reliable measure itself, i.e., $\alpha = .97$, the reliability coefficients of its 13 underlying LVs ranged from .95 to .52. The last two LVs, i.e., Emotional and Happy, consist of only one item each and thus lack alpha reliability index.

C. Procedures

The Persian version of the RMET translated and explored by Khorashad (2013) and Khorashad et al. (2014) was consulted to translate the English RMET into Persian by employing schema theory (Khodadady, 2000a, 2008a, 2008b; Lagzian, 2013) and the guidelines offered for developing multiple choice item tests (e.g., Farhady, Jafarpour, & Birjandi, 1994; Haladyna, 1994; Khodadady, 1999, 2000b). First, from the section dealing with word definitions, extraneous words not given as the keyed mental state or foils were removed to reduce the number of defined words from 93 to 74. Secondly, the English names were not changed into Persian names as was done on the RMET employed by K&N simply because the photos were taken from Western characters. Thirdly, the keyed response and its foils were numbered alphabetically and presented in a manner in which no two photos presented after one another had the same choice as their keyed response. And finally, the best Persian equivalents were chosen by consulting several monolingual and bilingual references (e.g., Haghshenas, Samei, & Entekhabi, 2001; Saatchi, 1992).

The word “playful”, for example, is translated as “SARZENDEH” by Khorashad (2013). In their English to Persian dictionary, Haghshenas et al. (2001), however, provided their readers with seven Persian equivalents for “playful”, i.e., 1. BAZIGOOSH, SHEYTAN, SARHAL, SHAD VA SHANGOOL, BA NESHAT, 2. BA BAZIGOOSHI, BA SHEYTANAT, SARHAL (p. 1286). As can be seen, SARZENDEH is not among the equivalents offered by Haghshenas et al. Similarly, Saatchi (1992) offered 12 English equivalents for SARZENDEH in his Persian to English dictionary none of which is “playful”, i.e., frolicsome, lively, animated, gay, breezy, cheerful, sprightly, vivacious, spirited, brisk, bold, daring (p. 1266).

The present researchers, therefore, revised not only the alternatives of the Persian RMET, but also translated those English words and their example sentences which had been left out by Khorashad et al. (2014). The newly revised and translated RMET was then printed in adequate numbers and administered to the participants of this study after their approval as well as that of their instructors in Ferdowsi University of Mashhad, Imam Reza and Khayyam universities had been secured. They took the EQS on a separate session and provided the researchers with the data required to explore the relationship between SQ and EQ. The researchers were present in the testing sessions and administered both tests under standard conditions.

D. Data Analysis

The descriptive statistics of the items comprising the RMET and EQS were calculated to determine how well they had functioned. The reliability of the two scales was estimated via Cronbach’s alpha. Upon establishing their reliability, the relationships between the RMET and EQS were explored by using Pearson Bivariate Correlations. The same correlations were utilized to find out whether the LVs underlying the participants’ emotional intelligence relate significantly to their social intelligence. All the descriptive and inferential statistics were conducted via IBM SPSS Statistics 20 to test the hypotheses below.

H1. The revised Persian RMET is as reliable as the RMET employed by K&N.

H2. There is no significant relationship between the Persian RMET and EQS.

H3. There are no significant relationships between the 15 factors underlying the EQS and the scores obtained on the RMET?

III. RESULTS

Table 1 presents the descriptive statistics of the RMET administered in the present, BWHR&P and K&N’s studies. (BWHR&P provide the statistics related to three groups. The statistics of their third group is chosen for comparison because they belonged to undergraduate university students as those of the present and K&N’s did). As can be seen, the mean score of the Iranian students on the RMET, i.e., 24.01, is lower than that of their British counterparts, i.e., 28.0. It is, however, higher than that of 161 Iranian students in K&N’s study, i.e., 21.7, indicating that schema-based translation of the RMET has decreased its difficulty level. In spite of becoming easier, the reliability level of the test in this study, i.e., $\alpha = 0.38$, is noticeably lower than that of K&N’s, i.e., $\alpha = .54$, *rejecting* the first hypothesis that *the revised Persian RMET will be as reliable as the RMET employed by K&N*.

TABLE 1
DESCRIPTIVE STATISTICS AND RELIABILITY ESTIMATES OF THE RMET

Test takers	Baron-Cohen <i>et al.</i> (2001)				Present study				K&N			
	N	Mean	SD	α	N	Mean	SD	α	N	Mean	SD	α
All	103	28.0	3.5	-	126	24.01	3.3	.38	161	21.7	3.9	.54
Females	50	28.6	3.2	-	55	23.35	3.4	-	127	21.8	3.9	-
Males	53	27.3	3.7	-	181	23.81	3.3	-	34	21.4	4.3	-

Two factors have contributed to the low reliability coefficient of the revised RMET in this study. The first and foremost is the negative ID index of item two (-.050), indicating that participants with lower social intelligence (SQ) did better than those with higher SQ. [In this study SQ is used to differentiate it from spiritual intelligence to which scholar such as Amram and Dryer (2007) and King (2008) refer to as SI]. The removal of item two from reliability analysis, for example, increased the alpha coefficient from .38 to .42. The second reason is the lower value of SD (3.3) compared to the value reported by K&N (3.9), reflecting differences in the homogeneity of the samples who took part in the two studies, i.e., the participants in this study were more homogeneous than those in K&N. In Thorndike and Hagan’s (1977) words, “A sample made up of children from a wide range of socioeconomic levels will tend to yield higher reliability coefficients than a very homogeneous one” (p. 89).

Table 2 presents the descriptive statistics of the Persian EQS and its 15 factors. As can be seen, the mean score on the EQS in this study is 417 (out of 560) which is very close to the score reported by K&T, i.e., 433, indicating that the participants of this study were emotionally as intelligent as K&T’s. The scale proved to be as reliable as it was in K&N’s study as well, .97. With the exception of Emotional and Happy factors whose reliability could not be estimated because of consisting of a single item, the alpha reliability coefficients (ARC) of other 13 factors ranged from .36 (Independent) to .93 (Self-Satisfying). The ARC of the Self-Satisfying factor is the same for both studies, i.e., .93. It is also higher than the ARC of the first factor, i.e. .93, obtained in this study because its standard deviation (SD) is higher, i.e., 18.1 vs. 15.4, indicating that the Self-Satisfying factor could differentiate emotionally intelligent participants better than the Humanistic factor did.

TABLE 2
DESCRIPTIVE STATISTICS AND RELIABILITY ESTIMATE OF 15 FACTORS UNDERLYING THE EQS

No	Factors	Mean	SD	Skew	Kurt	Alpha This study	Alpha K&T
1	Humanistic	109.01	15.414	-1.216	4.744	.90	.95
2	Self-Satisfying	113.70	18.148	-1.775	8.929	.93	.93
3	Self-Confident	45.21	7.705	-1.174	5.919	.86	.89
4	Self-Aware	35.59	7.181	-.268	-.253	.84	.87
5	Self-Controlled	23.04	5.717	-.168	-.321	.84	.84
6	Research-Oriented	18.51	3.609	-.711	1.117	.70	.79
7	Content	14.60	3.783	-.885	1.035	.87	.81
8	Sociable	16.01	3.091	-1.459	4.459	.70	.72
9	Empathetic	7.71	1.786	-.825	1.422	.83	.65
10	Tolerant	6.56	1.998	-.487	.222	.70	.67
11	Flexible	6.86	2.120	-.698	.334	.77	.74
12	Realistic	6.19	2.058	-.217	-.535	.62	.56
13	Independent	7.47	1.634	-.950	1.965	.36	.52
14	Emotional	3.87	1.024	-1.031	1.099	-	-
15	Happy	3.11	1.259	-.139	-.771	-	-
	EQS	417.44	56.612	-.467	1.354	.97	.97

Table 3 present the correlation coefficients (CCs) obtained between the EQS and RMET on the one hand and the factors underlying the EQS and RMET on the other. As can be seen, there is no significant relationship between emotional and social intelligences of university students. This result *confirms* the second hypothesis that *there is no significant relationship between the Persian RMET and EQS*. In line with Feizbakhsh's (2010) findings showing no significant relationship between EQ and teacher effectiveness as measured by a questionnaire called Characteristics of Effective English Language Teachers (Khodadady, 2010), the results of this study show that emotional intelligence as a cognitive domain does not relate to social intelligence as measured by the RMET.

TABLE 3
CORRELATIONS BETWEEN THE RMET AND EQS ALONG WITH ITS UNDERLYING FACTORS (N = 165)

Domain and Genera	RMET	Domain and Genera	RMET
EQS	.145	Sociable	.167*
Humanistic	.201**	Empathetic	.041
Self-Satisfying	.161*	Tolerant	-.018
Self-Confident	.036	Flexible	.044
Self-Aware	.216**	Realistic	.001
Self-Controlled	-.118	Independent	-.099
Research-Oriented	.008	Emotional	.087
Content	.097	Happy	-.015

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

While as a measure of social intelligence the RMET does not correlate significantly with the emotional intelligence as measured by the EQS, four of its underlying factors do, i.e., Humanistic ($r = .201, p < .01$), Self-Satisfying ($r = .161, p < .05$), Self-Aware ($r = .216, p < .01$) and Sociable ($r = .167, p < .05$). These results partially *reject* the third hypothesis that *there are no significant relationships between the 15 factors underlying the EQS and the scores obtained on the RMET*. These findings also show that as a cognitive domain, the emotional intelligence measured by the EQS consists of heterogamous cognitive genera most of which bear no relationship to social intelligence measured by the RMET.

IV. DISCUSSIONS

The results of this study are discussed by treating the words constituting the RMET and EQS as linguistic and cognitive schemata (see Khodadady & Mokhtary, 2014). The two measures did not reveal any significant relationship between social and emotional intelligences ($r = .145, ns$) because they differ from each other in terms of their constituting linguistic schema types, species and genera. While the former brings up 32 mental states and requires the test takers to choose them from among other 45 states all represented by a single noun schema and 46 adjective schema types belonging to the semantic domain of language only, the latter presents 223 semantic schema types which are repeated in various tokens and connected to each other by 57 and 17 syntactic and parasyntactic schema types, respectively, as shown in Table 4. The 297 schema types belong to semantic, syntactic and parasyntactic domains of language which comprise 112 statements describing the emotional intelligence of English language teachers in Iran.

TABLE 4
LINGUISTIC DOMAINS AND GENERA COMPRISING THE LANGUAGE OF 112-ITEM EQS

Domains	Genera	Tokens		Types	
		f	%	f	%
Semantic	Adjectives	99	10.2	48	16.2
	Adverbs	22	2.3	11	3.7
	Nouns	131	13.5	68	22.9
	Verbs	185	19.0	96	32.3
	Total	437	45.0	223	75.1
Syntactic	Conjunctions	22	2.3	5	1.7
	Determiners	76	7.8	14	4.7
	Prepositions	108	11.1	16	5.4
	Pronouns	165	17.0	15	5.1
	Syntactic verbs	23	2.4	7	2.4
Total	394	40.5	57	19.2	
Parasyntactic	Abbreviations	50	5.1	7	2.4
	Para-adverbs	31	3.2	9	3.0
	Particles	60	6.2	1	.3
	Total	141	14.5	17	5.7
Total		972	100.0	297	100.0

As can be seen in Table 4 above, the 112-item EQS is far richer than the RMET in terms of its language. The syntactic schema “I”, for example, has a token of 83 highlighting the role of test takers themselves as regards the evaluation of their own emotional intelligence. In contrast, there is no role for the same test takers to play in their social intelligence as measured by the RMET. Instead they have to put themselves in the shoes of certain actors and actresses in order to find out in what mental states they were when their photos were taken. In other words, while test takers evaluate their own emotional intelligence on the EQS by choosing options common to all statements, they have to decide what mental states other people were by choosing certain foils which change from photo to photo on the RMET.

Although the RMET does not correlate significantly with the EQS and thus establish the two social and emotional intelligences as two distinct and unrelated abilities, four genera underlying the emotional intelligence of undergraduate and graduate university (UGU) students do, i.e., Self-Aware ($r = .216, p < .01$), Humanistic ($r = .201, p < .01$), Sociable ($r = .167, p < .05$), and Self-Satisfying ($r = .161, p < .05$).

The Self-Aware genus of EQS shows the strongest relationship with the RMET ($r = .216, p < .01$) because individuals who enjoy this particular genus can easily express themselves, describe and share their feelings with others telling them whether they are angry with them. They easily tell people what they think, express their intimate feelings and ideas to others, tell them whether they disagree with them by showing affection and not allowing their impulsiveness create problems for them. The key cognitive schema which helps self-aware individuals to relate to people emotionally and thus employ their social intelligence effectively is their ability to accommodate “others”.

The cognitive schema type “I” has a token of three in the Self-Aware genus of emotional intelligence as does “others”, highlighting the importance of others in helping individuals acquire emotional self-awareness. While the schema type “me” has the second highest token after the particle “to”, i.e., 6 and 9 respectively, the schemata “my” and “easy” have both been used five times in the ten species comprising the genus, emphasizing the central role of test takers in determining their own emotional intelligence and the ease with which they can reach emotional self-awareness in social interactions.

In addition to Self-Aware factor, the RMET relates significantly to the Humanistic genus of EQS ($r = .201, p < .01$), indicating that the higher the social intelligence of UGU students majoring in English is, the more humanistic they become in their emotional intelligence. The significant correlation between the two variables is due to the role of the cognitive schemata “others” and “people” having tokens of four and three, respectively, play in developing the students’ humanistic EQ. The relationship between the Humanistic genus of EQS and the RMET is almost as strong as that of Self-Aware genus of EQ ($r = .216, p < .01$) though the former consists of 28 species whereas nine species comprise the latter.

The relatively weak but significant relationship between SQ and Humanistic genus of EQ is due to the centrality of “I” as compared to “others”. While the schema “I” contributes to Self-Aware genus three times, its token increases to 25 in the case of Humanistic genus of EQ. Two of the species comprising the genus, for example, reads: “I do not cling to others and try to stay independent”, “other people seem to need me more than I need them”, indicating that in spite of being social, individuals with high humanistic EQ attach more importance to their independence and self-sufficiency.

K&N seem to have employed the schema “Humanistic” to name the first genus of EQ based on species 105, “It’s hard for me to see people suffer”, having the fifth highest loading (.69) on the genus. Species 88, however, has the highest loading (.74) on Humanistic genus and involves “having good relations with others”. The main motive for species 88 seems to have been specified in species 84 having the second highest loading (.73), “I enjoy those things which interest me”, indicating that individuals with this particular genus pay attention to the mental states which concerns them and thus may stay indifferent towards most of the states brought up on the RMET which have little, if any, to do with their personal interests.

In addition to being self-oriented, the Humanistic genus of EQ contains a number of concepts none of which are addressed by the RMET, e.g., upsetting, law-abiding, comfortable, sensitive, sociable and right. Species 96, for example, reads, "I believe in my ability to handle most upsetting problems". Since there is no example as regards how upsetting problems are handled by humanistically intelligent individuals, one can assume that they will try "to be law-biding citizens" if their addressees upset them in a social interaction and thus exhibit an acceptable level of social intelligence whereas their self-aware counterparts "will show affection" and will therefore be recognized socially more intelligent.

As another genus related to social intelligence, the Sociable genus of EQ specifies individuals who make friends easily. It is also easy for these individuals to make adjustments and smile apparently because they like to help people. The sociable nature of this genus depends on containing the cognitive schemata "friends" and "people" whose cognitive formation must take place within a human society as specified in the two out of four species comprising the genus. These schemata in turn depend on the conscious and deliberate processes of "making friends" and "helping people" involved in social interaction, resulting in mutual understanding. The results of this study thus show that the higher the UGU students' social intelligence, the more sociable they become by employing their own emotions as reflected in the significant correlation between the genus and the RMET ($r = .167, p < .05$).

As the second factor underlying the EQS, Self-Satisfying genus of emotional intelligence consists of 30 cognitive species represented by 30 linguistic sentences. The species having the highest loading on the genus (.62) reads, "I enjoy what I do" followed by "I feel good about myself" and "It is easy for me to accept myself just the way I am", both having the second highest loading (.61) the genus. Since the RMET and Self-Satisfying genus of EQ correlate significantly with each other ($r = .161, p < .05$), their significant relationship highlights the indispensable role of others in helping Mashhadi individuals reach emotional self-satisfaction and relate to others emotionally.

V. CONCLUSION

The findings of the present study provide researchers and teachers alike with several conclusions. First, they show that social intelligence as measured by the RMET has little to do with emotional intelligence as measured by the EQS because the two scales do not correlate significantly with each other. This finding questions scholars like Goleman (1995) who claimed that

People's emotions are rarely put into words; far more often they are expressed through other cues. The key to intuiting another's feelings is in the ability to read nonverbal channels, tone of voice, gesture, facial expression and the like. . . . One rule of thumb used in communications research is that 90% or more of an emotional message is nonverbal. (pp. 110–11)

It is argued in this study that the very existence, identification and communication of emotions depend on the concepts they produce in human brains. The concepts themselves have to be represented by schemata whose materialization in linguistic forms or words allows their conceptualizers not only to refine and enrich their personally acquired concepts but also relate them to each other within the confines of space and time.

Secondly, the domain of social intelligence relates to certain genera of emotional intelligence, i.e., Self-Aware, Humanistic, Sociable, and Self-Satisfying, and thus necessitate emphasizing these genera in the fields which involve human interaction. The EFL teachers should, for example, be emotionally self-aware, humanistic, sociable and self-satisfying in order to enhance their own social intelligence. Since K&N's findings show that the RMET correlates significantly with the EFL students' language proficiency, then high proficiency levels can be adopted by authorities as their main criterion to recruit EFL teachers on the grounds that these teachers will be the most effective in their classes as documented by Khodadady and Dastgahian (2015a, 2015b) and Khodadady, Fakhraabadi and Azar (2012).

Although Sociable genus of EQS correlates significantly with the RMET, the correlation coefficient ($r = .17, p < .05$) does not reach .80. According to Hatch and Lazaraton (1991), two tests measure the same variable if they overlap highly, i.e., "with an r in the .80 to 1 range" (p. 442), indicating that the Sociable genus is not the same as social intelligence as measured by the RMET. The implication of this finding is that RMET needs to be administered with the EQS in order to have a more comprehensive estimate of test takers' social intelligence in general and their sociability in particular.

And finally, this study needs to be replicated and the RMET be administered along with other scales measuring emotional and social intelligences because the two must relate significantly to each other at domain, genera, species and schemata levels due to their dependence on emotions. The results of this study, however, show that the RMET relates significantly neither to the EQS nor to most of its constituting genera. In K&T's study, for example, the Self-Aware genus of EQS correlates the highest with its Self-Confident genus ($r = .60, p < .01$), explaining 36 percent of variance in each other. While the Self-Aware genus correlates significantly with the RMET, the Self-Confident genus does not, indicating that socially intelligent test takers are not self-confident.

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