The Relationship Between EFL Students' Cultural Schemata and their Performance on Cloze Tests with a Focus on Gender[1]

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Abstract

This mixed method study was designed to discover the relationship between male and female Iranian EFL students' cultural schemata and their performance on three types of cloze tests. It also investigated the relationship between gender and Iranian EFL students' degrees of cultural familiarity with culture-specific cloze texts. In addition, the male and female students' understanding of eight culture-specific words provided in culture-specific cloze texts is explored. The subjects of the study were 42 EFL university students (19 males and 23 females). Three different cloze tests with identical content with terms related to marriage, but different types of schemata, were developed. These included a cloze test with culturally neutral schemata of marriage terms, a cloze test with cultural schemata of marriage in Islam, and also a cloze test with cultural schemata of marriage in English. All three types of cloze tests were administered to the subjects in two sessions. Degrees of cultural familiarity were measured through a cultural familiarity questionnaire. A semi-structured interview was also used to explore both the males' and females' understanding of the eight culture-specific words provided in the culturally specific cloze tests. To analyze the data, an independent sample t-test and a paired sample t-test were used. The results of the study showed that females performed better than males on all three types of cloze tests. Furthermore, both males and females performed better on the second cloze test, the third, and the first cloze test respectively. The results also indicated that gender did not significantly affect the degrees of cultural familiarity.

Resumen

Este estudio de método mixto fue diseñado para descubrir la relación entre los esquemas culturales de los estudiantes iraníes de EFL masculinos y femeninos y su desempeño en tres tipos de pruebas cloze. También investigó la relación entre el género y los grados de familiaridad cultural de los estudiantes iraníes de inglés como lengua extranjera con los textos cloze específicos de la cultura. Además, se explora la comprensión de los estudiantes masculinos y femeninos de ocho palabras específicas de la cultura proporcionadas en textos de cloze específicos de la cultura. Los sujetos del estudio fueron 42 estudiantes universitarios EFL (19 hombres y 23 mujeres). Se desarrollaron tres pruebas de cloze diferentes con contenido idéntico con términos relacionados con el matrimonio, pero diferentes tipos de esquemas. Estos incluyeron una prueba cloze con esquemas culturalmente neutrales de los términos del matrimonio, una prueba cloze con esquemas culturales del matrimonio en el Islam y también una prueba cloze con esquemas culturales del matrimonio en inglés. Los tres tipos de pruebas de cloze se administraron a los sujetos en dos sesiones. Los grados de familiaridad cultural se midieron a través de un cuestionario de familiaridad cultural. También se utilizó una entrevista semiestructurada para explorar la comprensión de los hombres y las mujeres de las ocho palabras específicas de la cultura proporcionadas en las pruebas de cloze culturalmente específicas. Para analizar los datos, se utilizaron una prueba t de muestra independiente y una prueba t de muestra pareada. Los resultados del estudio mostraron que las hembras se desempeñaron mejor que los machos en los tres tipos de pruebas de cloze. Además, tanto los hombres como las mujeres se desempeñaron mejor en la segunda prueba de cloze, la tercera y la primera prueba de cloze, respectivamente. Los resultados también indicaron que el género no afectó significativamente los grados de familiaridad cultural.

Introduction

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Schema theory, a system of organizing and perceiving new information, came to prominence during the 1970s as a concept to investigate the role of schemas in reading comprehension texts. While reading texts, as Ajideh (2006) holds, learners often feel they have no background knowledge on the topic of the texts, whereas the actual problem is that they are unable to activate it. Besides, socio-cultural and cultural perspectives proposed their conceptualization of the schema theory during the 80s and 90s (Malcolm & Shariafian, 2002; Ortner,1990). Cultural schemata (also called schemas) are closely related to how readers combine their background knowledge with the text (Alderson, 2000; Carrell, 1983; Grabe & Stoller, 2002; Nassaji, 2002; Rumelhart, 1977) and deal with "expressing knowledge structures in the mind" (Nassaji, 2002, p. 444).

In recent years in English as a second language (ESL) and English as a foreign language (EFL), there has been a growing interest in studying the factors and variables that may affect English learners' (EL) performance in reading comprehension. Therefore, many researchers have addressed the test-takers and text variables as the most significant factors. Among these variables, the socio-cultural background or cultural schemata (Singhal, 1998; Upton & Lee-Thompson, 2001), as a text variable and gender as rarely probed test-takers' variable (Phakiti, 2003; Brantmeier, 2005), has attracted the attention of many researchers who work on language testing

Over the past decades, since reading ability has been considered as an important skill in academic achievement (Bernhardt, 1991), schema theory has played a significant role in the development of reading models and has had a considerable effect on reading comprehension test researches. At the same time, it is believed that in order to achieve communicative competence in the target language, EFL learners need to understand the mutual relationship between language and culture (Maksud & Walker, 2014); to optimally construct intercultural competence (Kilianska-Przybylo, 2012). Taking into consideration such a role, a great body of studies have been conducted and found that background knowledge may affect reading comprehension (Floyd & Carrel, 1987). In the recent decade, changes in language methodology affected language testing, hence, test developers have attempted to change their method in testing reading comprehension. One of the most important changes has been shifting the discrete-point to integrative-point tests (Farhady et al., 1994). Since then, cloze test, a sub-type of reading comprehension test, has remained the most prominent and representative type of integrative-point test (Dastjerdi & Talebinezhad, 2006).

In Iran, there has also been a tendency among testing researchers to investigate the reciprocal effects of cultural schemata on reading comprehension and test type. Some studies (e.g., Alptekin, 2006) which spelled out cultures based on cultural notions and conceptualizations revealed the importance of cultural schema theory for studies of intercultural pragmatics and help the body of research on intercultural communication, including speakers of Persian. The Persian cultural pragmatic schemas, such as Sharmandegi "being ashamed", *Shekaste nafsi* "modesty" etc., have revealed the need for intercultural understanding, which requires close consideration and specialized research studies, perhaps more than ever in the history of human interaction (Sharifian, 2005, 2011).

Recently, some researchers have attempted to investigate the potential effect of cultural schemata on reading comprehension and cloze tests, but gender differences in cloze tests have not been studied sufficiently. Therefore, this study aims at investigating the relationship between cultural schemata based on the performance of Iranian EFL students in three different types of a cloze test Moreover, this research explores the potential interaction that may exist between the type of cultural schemata provided in cloze texts and reading performance by male and female students..

Materials and Methods

Design of the study

A mixed-method approach was implemented to identify and explore the objectives of the study. To this aim, in the quantitative phase, three types of cloze tests with an identical content but different cultural schemata were administered to the participants to identify the potential relationship between EFL male and female students' cultural schemata activated in the cloze texts and their performance, i.e., scores. In this phase, a

cultural familiarity questionnaire was also administered to identify the potential relationship between gender and degrees of cultural familiarity. In the qualitative phase, a semi-structured interview was administered to find the participants' understanding of the cultural specific content words in two types of the cloze tests with culturally specific schemata.

Participants

A total of 42 intermediate EFL university students (19 male and 23 female) who were selected out of 65 based on the English Oxford Placement Test (OPT) participated in this study. They were between 18 and 27 years old. They had enrolled in a private English language institute in Shiraz, Iran. The semester consisted of 60 sessions, six hours per week.

Instrumentation

In the quantitative phase, three types of cloze tests with identical content but different cultural schemata were administered to the participants to identify the potential relationship between EFL male and female students' cultural schemata activated in the cloze texts and their performance i.e., scores. In this phase, a cultural familiarity questionnaire was administered as well to identify the potential relationship between gender and degrees of cultural familiarity. In the qualitative phase, a semi-structured interview was applied to explore students' understanding of the culture-specific content words provided in three types of cloze tests which contained culturally specific schemata.

The four types of instruments which were used in this study are as follows:

OPT

The original test included 200 test items from which the researcher chose the second part including 50 items it resembled a cloze test. The participants were given about 25 minutes to take the OPT. According to their scores on OPT, the most homogenous participants were selected for the study: those whose scores were within one standard deviation above and below the mean.

Cloze tests

All three types of cloze tests in the present study were developed by the researcher. To select the texts for developing cloze tests, the researcher utilized authentic written texts available on the internet. Then they were classified based on the types of schemata that emerged in each of them, i.e., cultural schemata of marriage in Iran. Other texts which did not include any types of cultural schemata were considered as neutral. These types of texts consisted of global definitions and notions of marriage terms. Three types of criteria were used: (1) readability of the texts; (2) a sample of standard TOEFL reading text adopted from a Longman IBT book; and (3) an experienced expert's judgment. To determine the readability of the texts, Fog's index was used (Farhady & Keramati, 1996). The Cronbach's alpha index for the reliability of the cloze tests in the present study was estimated at 0.46, 0.42, and 0.38 respectively. As it was suggested by Brown (1989), 0.95 and 0.31 were the highest and lowest acceptable reliability estimates for cloze tests respectively.

Table 1 presents the estimated readability of each newly developed text for cloze tests. To this end, the number of words (any morphologically independent unit, i.e., articles, prepositions, and interjections were counted as words), the number of polysyllable words (words with three or more syllables), and the number of sentences counted and applied to the following formula:

$$\text{Fog's readability formula} = \frac{\text{number of words}}{\text{number of sentences}} + (\frac{\text{number of pollysyllable words}}{\text{number of words}})40$$

Texts	Readability
Global definitions and notions of marriage	16.03
Cultural schemata of marriage in Iran, i.e., Islamic point of view	15.52
Cultural schemata of marriage in English, i.e., a case of the Christian point of view	15.34

Table 1: Readability of three types of selected texts

Tables 2, 3, and 4 present a summary of the characteristics of each type of cloze test developed by the researcher. To minimize the effects of other possible variables on the results of the study, the three cloze tests were almost uniform in length, the number of deletions, and in the types of words deleted. Every deletion in the cloze tests was considered as an item and each item included three choices, i.e., one correct response and two distractors. In order to develop the distractors for cloze test items, a Merriam-Webster thesaurus dictionary was used. The least frequent entries of meaning pertaining to a content word were considered as distractors for each item in the cloze tests.

Culturally neutral schemata of marriage terms	Number of words	Number of deletions	Number of deleted content words			
			N	V	Adj	Adv
Global definitions of marriage: • Marriage as a contract • Marriage as a union • Marriage as a set of rights • Marriage as a ritual	175	15	6	3	4	2

Table 2: Characteristics of cloze test 1: Global definitions of marriage terms

Table 3 and 4 show the charactristics of the cloze tests employed in this study. The common practice in developing a cloze-test is to leave the first sentence intact which is taken into account in the cloze tests used here. Another issue which is pivotal in developing a cloze test is the manner and number of deletions. To ensure the coherence of the texts, the researshers of this study deleted only the content words and attempted to minize differences in the types of the target words.

Cultural schemata of marriage terms in Iran, i.e., Islamic point of view	Number of words	Number of deletions	Number of deleted content words			
			N	V	Adj	Adv
Definition of marriage in Quran • Prophet Mohammad's statement about marriage • Describing marriage as garments • Conditions of marriage in Islam • Rituals of the marriage contract in Islam • The notion of Mahr • The possibility of polygamy for men in Islam • The rights of divorce and living conditions	190	15	8	5	5	-

Table 3: Characteristics of cloze test 2: Definitions and notions of marriage terms in Iran
(Islamic point of view)

Cultural schemata of marriage term in English a case of the Christian point of view	Number of words	Number of deletions	Number of deleted content words			
			N	V	Adj	Adv
Definition of marriage for Christians • The aim of marriage in Christianity • Marriage as a union between Christianity and the church • The rituals of the marriage contract in the church by a priest • The notion of civil marriage • Prohibition of polygamy and polyandry in Christianity • The notions of temporal separation and divorce	185	15	7	4	4	-

Table 4: Characteristics of cloze test 3: Definitions and notions of marriage terms in English
(Christian point of view)

Cultural Familiarity Questionnaire

Adapting Brantmier's (2003) model, to identify the effect of gender variable on degrees of cultural familiarity with cultural specific cloze tests, i.e., cloze test 2 and cloze test 3, the researchers developed a questionnaire based on 5-Point Likert scale with a range from: (5) really familiar, (4) familiar, (3) rather familiar, (2) not familiar, (1) not really familiar.

Semi-structured Interview

In order to explore the way in which the participants understand culturally specific words provided in both cloze test 2 and 3, a Semi-structured interviews was administered to the participants. The researchers used two questions similar to the questionnaire as a guide, while still having the freedom to digress and probe for more information (Mackay & Gass, 2005). The questions of interview constructed in a handout form to avoid any ambiguity by the participants. The participants were asked to provide a verbal self-report of their understanding based on two specific questions. These questions are similar to the ones applied by Sasaki (2000) who investigated how schemata activated by culturally familiar words might have influenced students' cloze test-taking processes.

Pilot Study

The researcher asked 20 intermediate EFL students, ten males, and ten females, who were studying at Velayat University, to participate in piloting sessions. The students were expected to respond to the three types of cloze tests exactly as it was to be done by the actual participants of the study. The pilot test and the subsequent item analysis showed that some of the distractors, which had not been chosen by any of the participants, had to be modified, i.e., they were non-functioning distractors.

The revised cloze tests were given to another group of 20 EFL students from the same university for piloting purposes. The follow-up analysis of the students' responses to the test revealed that the items were properly functioning and could be used in the main study.

Main Study

Data collection procedures

Data collection took eight sessions, four sessions each for the male and female groups. They received a packet containing a consent form and a background information form. The background information form was employed to elicit information about each participants' age, gender, language learning experiences, amount of experiences, level of proficiency, number of lessons per week, length of staying in an English-speaking country to ensure homogeneity between the groups.

Data analysis

In the analysis of the quantitative data, independent and paired sample t-tests were exploited to find out whether differences in the performance of the male and female participants on the three cloze types was significant, and to determine if there had been any relationship between gender and cultural familiarity. For qualitative data analysis, the recorded data collected from the interviews were transcribed according to the transcription's conventions developed by Gardner and Wagner (2004). The transcriptions were studied several times. It is worth mentioning that the researchers, very often at their first attempt, provided a rough transcription of the data. In order to make the best use of the data transcribed, it is necessary to go through the transcription several times to discover what might have been overlooked. In this study, there were 42 excerpts to be analyzed. Then, the data were coded for fine transcription and further interpretation .

Results

Is there any relationship between Iranian male EFL students' cultural schemata and their performance on cloze tests?

Performances of male students on the three types of cloze tests

Figure 1 displays the results of the male participants' performance on the three cloze tests. Based on the results, this group has had their best performance on the cloze test with cultural schemata of marriage in Islam (Mean=8.21, SD=1.93). The second-best performance has been related to the test with cultural schemata of marriage in English (Mean=7.74, SD=1.79) and the lowest score was found for the cloze test with culturally neutral schemata of marriage term (Mean=7.31, SD=1.56).
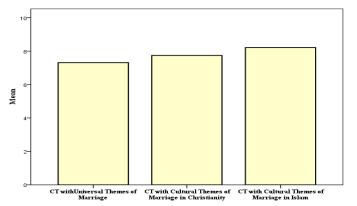

Figure 1: Male students' performances on the three types of cloze tests by their mean scores differences

The mean difference value has been reported as -.89, which means that the mean value for the cloze test with culturally neutral schemata of marriage term is .89, lower than the mean value for the cloze test with cultural schemata of marriage in Islam. According to the reported *p*-value (*p*=.017, *p*<.05), it can be seen that this difference is statistically significant. The value of the mean differences has been reported as .42,

which means that the male participants have had a better performance on the cloze test with cultural schemata of marriage in English than the cloze test with culturally neutral schemata of marriage term. Yet, this value of the mean difference is not statistically significant because the *p*-value is .42 and higher than .05. The mean difference value between the male students' performances is .47, which means that the participants have outperformed on the cloze test with cultural schemata of marriage in Islam. However, the mean difference between the two performances is not statistically significant ($p=.166$, $p>.05$).

Therefore, there is no relationship between Iranian male EFL students and their performance on cloze tests.

Is there any relationship between Iranian female EFL students' cultural schemata and their performance on cloze tests?

Performances of female students on the three types of cloze tests

Figure 2 displays that all-female students have had their best performance on the cloze test with cultural schemata of marriage in Islam (Mean=9.61, SD=1.90). The second-best performance has been related to the cloze test with cultural schemata of marriage in English (Mean=8.48, SD=1.83). Finally, the lowest score in performance has been associated with the cloze test with culturally neutral schemata of the marriage term (Mean=8.22, SD=1.54).
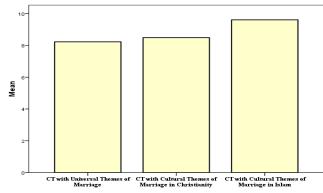

Figure 2: Female students' performances on the three types of cloze tests by their mean scores differences

According to the results, the value of the mean difference between the two performances of the group is -1.39. The findings further indicate that the difference in the mean value of the two performances is statistically significant ($p=.000$, $p<.05$).

Based on the results, the participants have had a slightly better performance on the cloze test with cultural schemata of English than on the cloze test with culturally neutral schemata of marriage (Value of the mean difference= -.26). The results further reveal that the difference in the two performances of the same group is not statistically significant ($p=.514$, $p>.05$).

Also, based on the results of this study, the participants' performance on the cloze test with cultural schemata of marriage in Islam has been better than that on the cloze test with cultural schemata of marriage in English (value of the mean difference between the two performances = 1.36). The mean difference value between the two performances is 1.36. The *p*-value is .001 and lower than .05 which can further approve that the variability between the two performances of the group is statistically significant. Therefore, there is a relationship between Iranian female EFL students' cultural schemata and their performance on cloze tests.

Is there any relationship between gender and performance on cloze tests?

The relationship between gender and performance on the cloze test with culturally neutral schemata of marriage terms

Nineteen male and 23 female students took the cloze test with culturally neutral schemata of the marriage term. As shown in Table 5, the reBRPG-Tablesults of this study indicate that the mean value for the female students (8.22) has been higher than the mean value for the male students (7.31). It further shows that the variation of scores around the mean score for the female students (SD=1.54) has been lower than that for the male students (SD=1.57). Based on the results, it can be claimed that female students have outperformed their male counterparts on the cloze test with culturally neutral schemata of the marriage term.

Gender	N	Mean	Std. Deviation
Male	19	7.3158	1.56534
Female	23	8.2174	1.53613

Table 5: Descriptive statistics results on the effect of students' gender on their performance on the cloze test with culturally neutral schemata of marriage term

In Table 6, the Sig. level under the section Levene's test for equality of variances is .81 and higher than .05. The degree of freedom can be computed through summing the number of participants in each group minus 1. The degree of freedom for the male group is (19-1=) 18 and it is 22 (23-1) for the female participants. Therefore, the degree of freedom for the two groups has been reported as 40 (18+22). The table also indicates that the mean difference value between the two groups is about -.9. To see whether this difference is statistically significant or not, it is necessary to refer to the 2-tailed Sig. column. The p value which has been reported here is .068 and higher than .05. Accordingly, it can concluded that there has been no statistically significant difference between male and females in their performance on cloze test with culturally neutral schemata of marriage term.

Equal Variances	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	DF	Sig. (2-tailed)	Mean Difference
Assumed	.058	.811	-1.877	40	.068	-.90160
Not Assumed			-1.874	38.233	.069	-.90160

Table 6: Independent samples t-test :Results of the relationship between gender and performance on the cloze test with culturally neutral schemata of marriage terms.

The relationship between gender and performance on the cloze test with cultural schemata of marriage in Iran

Table 7 summarizes the results of the performances of male and female participants taken in the cloze test with cultural schemata of marriage in Iran. It can be seen that female participants with a mean value of 9.60 and the standard deviation index of 1.90 have outperformed male participants with a mean value of 8.21 and the standard deviation index of 1.93.

Gender	N	Mean	Std. Deviation
Male	19	8.2105	1.93158
Female	23	9.6087	1.90070

Table 7: Descriptive statistics results of the effect of students' gender on their performance on the cloze test with cultural schemata of marriage in Iran

As Table 8 indicates, the Sig. Level under the Leven's test section is .96 which is above .05. Thus, equal variances of scores have been assumed and the first row under the section *T-test for Equality of Means* should be considered in reporting the findings. The table shows that the difference is statistically significant ($p_=$.023, $p<$.05). Thus, it can be concluded that female students have outperformed the male students on the cloze test with cultural schemata of marriage in Iran.

Equal Variances	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	DF	Sig. (2-tailed)	Mean Difference
Assumed	.002	.965	-2.356	40	.023	-1.39817
Not Assumed			-2.352	38.276	.024	-1.39817

Table 8: Independent samples t-test: Results of the relationship between gender and performance on the cloze test with cultural schemata of marriage in Iran

The relationship between gender and performance on the cloze test with cultural schemata of marriage in English

Table 9 reveals that the mean value for the 23 female students was (8.5), which is higher than the mean value for the 19 male students (7.74). Also, the results show that the standard deviation value for the female students (1.83) was a bit higher than that for the male students (1.79).

Gender	N	Mean	Std. Deviation
Male	19	7.7368	1.79016
Female	23	8.4783	1.83079

Table 9: Descriptive statistical results of the effect of students' gender on their performance on the cloze test with cultural schemata of marriage in English (a case of a Christian point of view)

As it is evident in Table 10, the Sig. level under the Levene's test section has a value of .97. It means that the assumption of equal variances of scores has not been violated and one should consider the first row under the *T-test for equality of mean section* to report the results.

However, the value of the mean difference between the two groups is not statistically significant because the *p*-value is .195 and much higher than .05. Therefore, there is no relationship between gender and performance on cloze tests.

Equal Variances	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	DF	Sig. (2-tailed)	Mean Difference
Assumed	.002	.969	-1.319	40	.195	-.74142
Not Assumed			-1.322	38.827	.194	-.74142

Table 10: Independent samples t-test results on the relationship between gender and performance on the English Cloze test with cultural schemata of marriage in English

Is there any relationship between gender and degrees of cultural familiarity with culturally specific cloze tests?

The relationship between gender and degrees of cultural familiarity with cultural schemata of marriage in Islam

Table 11 summarizes the results of the relationship between gender and cultural familiarity of marriage terms in Islam. The results show that the index of the mean value for the female students is (3.56), which is higher than the index of the mean value for the male students (2.95). Besides, the index of standard deviation for the female students (1.12) is higher than that of the male students (1.02).

Gender	N	Mean	Std. Deviation
Male	19	2.9474	1.02598
Female	23	3.5652	1.12112

Table 11: Descriptive statistics results of the effect of students' gender on cultural familiarity with cultural schemata of marriage in Islam

Table 12 shows that the Sig. level under the Levene's test section is (.418) and higher than (.05) and the value of the mean difference between the two groups of participants is (.62). However, the *p*-value is (.072) and a bit higher than (.05). This indicates that male and female students did not perceive the marriage terms in Islam significantly differently.

Equal Variances	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	DF	Sig. (2-tailed)	Mean Difference
Assumed	.671	.418	-1.846	40	.072	-.61785
Not Assumed			-1.862	39.544	.070	-.61785

Table 12: Independent samples t-test: Results of the relationship between gender and degrees of cultural familiarity with cultural schemata of marriage in Islam

The relationship between gender and degrees of cultural familiarity with cultural schemata of marriage in English

As shown in Table 13 below, the mean values for both male and female students have been almost the same.The mean for male was 2.58 and mean value for females .56. Furthermore, the standard deviation value for the male students was (1.07) while it was (1.44) for the female students. Therefore, it seems that female and male students were not different regarding their degrees of cultural familiarity with cultural schemata of marriage in English depicted in the relevant cloze test.

Gender	N	Mean	Std. Deviation
Male	19	2.5789	1.07061
Female	23	2.5652	1.44052

Table 13: Descriptive statistics results of the effect of students' gender on their degrees of cultural familiarity with cultural schemata of marriage in English

Table 14 also shows that the Sig. level under the Leven's test section was (.166), higher than the p-value of (.05). Accordingly, the assumption of equal variances of scores around the mean was not violated. The degree of freedom for the two groups of participants was (40) and the value of the two groups' mean difference was only (0.14), which is not statistically significant ($p=.973$, $p>0.05$). Therefore, there is no relationship between gender and degrees of cultural familiarity with culturally specific cloze tests.

Equal Variances	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	DF	Sig. (2-tailed)	Mean Difference
Assumed	1.992	.166	-.034	40	.973	-.01373
Not Assumed			-.035	39.611	.972	-.01373

Table 14: Independent samples t-test results of the relationship between gender and degrees of cultural familiarity with cultural schemata of marriage in English

What is Iranian male EFL students' understanding of culturally specific words provided in cloze tests?

The male students' understanding based on the first question in the interview

Table 15 presents a report on the categories and frequencies of the male students' understanding of four culturally specific words on the cloze test with cultural schemata of marriage in Iran. These reports are provided based on the first question in the interview.

As this table indicates in the first category, i.e., *understood the culturally related concept*, the most frequent content words were *witness* and *polygamy* and the least frequent ones were *stipulation* and *solemnizing*. Moreover, the male students reported understanding the content words specific to their culture differently. In addition, none of the male students reported a total understanding of the English words in their own culture. It can be said that the more familiar words in English texts were reported with the most frequency; on the other hand, the words which are less used in English texts were reported by the least frequencies by the male students.

Culturally specific words	Understood the culturally related concept	Understood the culturally unrelated concept	Not understood	Not mentioned
Solemnizing	4	10	3	2
Witness	11	8	-	-
Polygamy	8	6	3	2
Stipulation	2	8	5	4

Table 15: Male students' understanding of four culturally specific words on the cloze test with cultural schemata of marriage in Iran.

Regarding the second category, i.e., *understood the culturally un-related concept*, it can be understood that the words such as *solemnizing*, *witness*, *stipulation* were reported with rather similar frequencies. In addition, male students reported the word *polygamy* with the least frequency. This understanding may be attributed to the fact that in English texts, these culturally specific content words are used with different frequencies.

All in all, according to the results of this study, the male students showed evidence of a different understanding of the culturally specific words in English with the content of marriage.

Male students' understanding based on the second question in the interview

Table 16 presents categories and frequencies of the male students' understanding of four culturally specific words on the cloze test with cultural schemata of marriage in Iran. These reports are based on the second question in the interview. These reported frequencies in terms of the male students' thinking confirmed the counterpart reported frequencies regarding the male students' understanding; in other words, thinking was used as more confident criteria to confirm the reported understanding by the male students. A closer look

at the two types of reporting shows that the male students' thinking about the culturally specific words is consistent with their understanding.

Culturally specific words	Thought about the culturally related meaning	Thought about the culturally unrelated meaning	Not mentioned
Solemnizing	5	12	2
Witness	16	3	-
Polygamy	16	3	-
Stipulation	2	13	4

Table 16: Male students' understanding of four culturally specific words on the cloze test with the cultural schemata of marriage in Iran.

What is Iranian female EFL students' understanding of culturally specific words provided in cloze tests?

Female students' understanding based on the first question in the interview

Table 17 tabulates categories and frequencies of the female students' understanding of four culturally specific words on the cloze test with cultural schemata of marriage in Iran. As the Table indicates in the first category, i.e., *understood the culturally related concept*, the words such as *witness* and *polygamy* were reported as the most frequent words. In other words, most of the female students understood these words correctly based on the culturally related concept. The least frequently indicated words were *solemnizing* and *stipulation*. This means that only a few of the female students understood *stipulation* correctly. Considering the second category, i.e., *understood the culturally un-related words*, *stipulation* and *solemnizing* show the highest frequencies which means that most students understood these words incorrectly. However, understanding the words such as *witness* and *polygamy* were reported as the least frequent ones. Thus, it can be claimed that although the male and female students showed a lack of complete understanding of the cultural specific words in their own culture (in Islam point of view), it cannot be attributed to their lack of familiarity or lack of understanding of these words but rather may be related to high difficulty level for intermediate students or these words being less common in English Islamic texts.

However, the female students had problem with understanding the least frequent words in English texts.

Culturally specific words	Understood the culturally related concept	Understood the culturally unrelated concept	Not understood	Not mentioned
Solemnizing	5	11	3	4
Witness	18	5	-	-
Polygamy	10	8	3	2
Stipulation	2	12	6	2

Table 17: Female students' understanding of four culturally specific words on the cloze test with the cultural schemata of marriage in Iran.

Female students' understanding based on the second question in the interview

Table 18 presents categories and frequencies of the female students' understanding of four culturally specific words on the cloze test with cultural schemata of Islam. These reports are provided based on the second question of the interview which required the participants to state what their perception of the words taken from the three cloze tests while they were doing the cloze tests. As the Table shows, in the first category, i.e., *thought about culturally related meaning*, which reports on thinking about the culturally specific words in their own culture, the female students showed different results in comparison with their reports in the first question of the interview. For example, most of the female students reported understanding the word *witness* based on the culturally related meaning in the first question of the interview. However, in the second question of the interview they reported *polygamy* as the most frequent word. Another example is seen in the words such as *stipulation* and *witness*; that is, the words such as *stipulation* in the first question and *witness* in the second question are reported as the least frequent words. The contrast between the reported understandings by the female students may be interpreted in the light of the fact that the female students have made a distinction between the first and the second question in the interview; while, the second question is similar to the first question in terms of eliciting the students' understanding and has been considered to confirm the reported viewpoints by the students.

Culturally specific words	Thought about the culturally related meaning	Thought about the culturally unrelated meaning	Not mentioned
Solemnizing	4	15	4
Witness	3	15	5
Polygamy	20	3	-
Stipulation	1	15	8

Table 18: Female students' understanding of four culturally specific words on the cloze test with the cultural schemata of marriage in Iran

In Table 19 categories and frequencies of the female students' understanding of the four culturally specific words on the cloze test with cultural schemata of marriage in English are shown. These reports are provided based on the second question of the interview. The table indicates, in the first category, i.e., thought about culturally related meaning, the words such as priest and civil marriage are reported as the least frequent. This is in contrast with the reported understanding by the female students in the first question where authorized minister was the least frequent word. Moreover, the words such as polygamy and polyandry and authorized minister have the highest frequency, while in the first question of the interview the female students reported witness as the most frequent word in terms of their understanding based on the culturally related concept. The second category shows that most female students understood the words such as priest and civil marriage based on the culturally un-related meaning while in the first question of the interview they reported the words such as civil marriage, authorized minister, polygamy and polyandry as the most frequent ones. Finally, the female students reported polygamy polyandry and priest, respectively, as the least frequent words in the second and the first question of the interview.

Culturally specific words	Thought about the culturally related meaning	Thought about the culturally unrelated meaning	Not mentioned
Priest	2	21	-
Authorized minister	10	12	1
Civil marriage	2	16	5
Polugamy and polyandry	15	8	-

Table 19: Female students' understanding of four culturally specific words on the cloze test with the cultural schemata of marriage in English.

Discussion

The first main finding of this study was that females performed better on three types of cloze tests with three different schemata. This supports the findings of most of the previous studies that have reported that females have an advantage over males on cloze test performance and reading comprehension. This confirms the findings of Brantmeier's (2002, 2004) study, in which females performed better than males in the comprehension of given passages in a written recall task. Furthermore, the findings of this study are inconsistent with Keshavarz and Ashtarian's (2008). study Using three types of texts with both males and females, they found that females were better in comprehending the all three types of reading texts they have utilized. However, the findings of this study are not in line with those of Young and Oxford's (1997) who found no significant difference between males and females for all three texts that they used.

The second main finding of this study was that both males and females performed the best on the cloze test with cultural schemata of Islam followed by the cloze test with cultural schemata of marriage in Christianity and then on the cloze test with culturally neutral schemata of marriage terms. This finding matches with the results of the study conducted by Keshavarz and Ashtarian (2008) in which it is stated that as far as the comprehension of essays based on history and short stories, gender did not bring about any variation in the comprehension of texts which were schematically different. Regarding the finding that both males and females performed better on the cloze test with familiar cultural schemata than with the cloze test with unfamiliar cultural schemata, many similar studies support these findings. For instance, Brantmeier's (2003) finding in a study of examining the effect of readers' gender on different types of cultural schemata provided on the second language reading comprehension from an intermediate level of Spanish language instruction revealed that the familiarity with the type of the text has a facilitative effect on second language comprehension.

Furthermore, Sasaki (2000) utilizing a process-oriented method and the same cloze tests used by Chihara et al. (1989) found a similar result. Besides, this finding of the study seems to support Sharafi and Barati's

(2010) claim that participants perform significantly better on the culturally familiar than on culturally neutral cloze tests.

The third main finding of this study was that gender did not affect the students' reports in terms of their degrees of cultural familiarity. In other words, they did not show any significant difference in their degrees of cultural familiarity with the culturally specific cloze tests. This is in contrast to Brantmier's (2002) study, in which he used two different authentic narrative passages and found that males and females indicated different results. This contradiction may be related to the types of schemata provided in each of the narratives. Since he used two different gender-oriented texts: one with the topic of boxing and one with the topic of a frustrated housewife.

The fourth, main finding of this study was that in both male and female groups, none of the students showed a complete understanding of the eight culturally specific words provided in cultural-specific cloze tests. This finding seems contradictory to Sasaki's (2000) study as she found that all students reported their complete understanding of the culturally familiar words. This contradiction may be justified in the light of the fact that Sasaki's study and the present study are different in terms of the types of the content of the cloze tests as well as the proficiency level of the subjects.

Conclusion and Implications

In order to identify the relationship between male and female students' cultural schemata and their performance (scores) in three types of cloze tests, research based on a mixed-method approach was conducted. Males and females' understanding of the culturally specific words were shown based on the types and frequencies of identified patterns emerged from their reports in the interview. According to the results, female EFL students performed better on all three types of the cloze tests than males. Furthermore, both males and females performed better on the second cloze test (cultural schemata of marriage in Islam's point of view) the third (cultural schemata of marriage in English, a case of Christianity's point of view) and the first cloze test (culturally neutral schemata of marriage term) respectively. The results indicated that gender did not affect performance on cloze tests and the degrees of culturally familiarity significantly.

Disregarding their gender, all the participants showed different performance on different types of cloze tests. Thus, teachers should include different types of cloze texts from different cultures rather than only focusing on their own culture or English culture. This might lead test developers to make reasonable predictions about the probability of the cloze tests in eliciting the students' maximum performance in the best way.

The findings of the present study might inspire the material developers to include teaching materials which contain texts related to various cultures. Integrating these texts in a balanced way in textbooks might help students to get more familiarized with different cultures.

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Appendix

Cloze Test 1 (with culturally neutral schemata of marriage term)

Marriage is a universal institution, but defining it adequately presents a challenge. One authoritative 1---------focuses on perhaps the most common 2--------and states that marriage is a 3----------between a man and a woman such that children 4-------- to the woman are recognized legitimate 5-----------of both parents. Other definitions generally emphasize that the 6-------union is socially and legally recognized and establishes a family as a 7--------unit that regulates sexual activity, produces and 8--------children, implies some reciprocal 9-------between spouses and between them and their children and 10------a basic economic unit . In short, marriage could be seen as a set of rights that gives access to the spouses' sexuality, labor and property. 11--------; not all of these aspects are 12-------- present in all marriages. Marriage perhaps involves rituals more 13---------than those of any other life event in most cultures. The 14------of such rituals makes generalization difficult but 15---------the rituals in the language culture context shows similar 16---------in different functions and symbolism.

1. a) meaning   b) definition   c) description
2. b) characteristic   b) distinctive   c) representative
3. a) combination   b) union   c) organization
4. a) trained   b) innate   c) born
5. a) progeny   b) descendent   c)offspring
6. a)spousal   b) marital   c) wedded
7. a) social   b) common   c) shared
8. a)nurtures   b) educates   c) raises
9. a) truth   b) rights   c) moralities
10. a) constitutes   b) finds   c) set up
11. a) although   b) whereas   c) however
12. a) necessarily   b) inevitably   c) avoidably
13. a) extravagant   b) elaborate   c) intricate
14. a) range   b) variety   c) change
15. a) engaging   b) employing   c) placing
16. a) features   b) types   c) structures

Cloze Test 2 (with cultural schemata of marriage in Iran, in Islam's point of view)

Marriage is defined in the Quran as a compassionate and peaceful relationship that is grounded in love and is such an important step that our prophet Mohammad, spoke of marriage as being half of 1----------. By describing 2----- as "garments" for one another. Islam 3 ------- supportive, protective and nurturing marital relationships. The marriage 4-------- ceremony in Islam must include the consenting and competent 5--------- who are of marriageable age. It should be a person 6--------- the marriage who typically is an " Imam" or "Khateeb" and two 7-------. Before signing the contract the solemnizer ask the couple whether they consent and for the 8----------of the "Mahr" which is a gift 9------- from the groom to the bride that may be immediate, ongoing or deferred and is 10-------- upon. In Islam a potentially 11---------- marriage exists where the male partner has only one wife but under the law, has capacity to 12--------another wife (wives) without divorcing the first. Islamic law 13 -------- for stipulations to be 14 -------- to the marriage contract. Typical stipulations in the contract cover issues such as 15 ------ divorce rights, monogamy, education, work, domestic responsibilities and living condition.

1. a) life   b) religion   c) Islam
2. a) pairs   b) parents   c) spouses
3. a) guides   b) encourages   c) assists
4. a) bound   b) contract   c) settlement
5. a) pairs   b) parties   c) couple
6. a) celebrating   b) worshiping   c) solemnizing
7. a) witnesses   b) observers   c) authorized
8. a)amount   b) extent   c) number

9. a) limitation   b) stipulation   c) qualification
10. a) un payable   b) payable   c) receivable
11. a) monogamous   b) polyandrous   c) polygamous
12. a) take   b) divorce   c) accept
13. a) allows   b) denies   c) admits
14. a) emphasized   b) added   c) reduced
15. a) alike   b) different   c) equal

Cloze Test 3 (with cultural schemata of marriage in English, a case of Christianity's point of view)

Christian marriage is a permanent union between a man and a woman sharing life for better or worse and fulfilling all their rights and obligations with the aim of ensuring the good of the 1-------giving birth and raising children in the Christian way. It is an 2--------- that signifies the union between Chris and the 3--------. The marriage takes place between a 4------- man and woman and is blessed by an authorized minister or5-------according to ecclesiastical rituals. Since marriage is 6------ and performing it at the hand of an 7--------- priest according to the church laws and 8-------- is a basic element in ensuring the 9-------- of a marriage, civil marriage is not 10--------- church authorities and considered void by all Christian sects. The Christian marriage has two 11----------- qualities: permanence and unity since 12---------and polyandry are 13----------; let each man have his or her wife and let each woman have her own husband . However, there are 14-------- where spouses are 15---------- without ending the bond of marriage between them. This is called separation and could be permanent or temporary.

1. a) pairs   b) people   c) couple
2. a) sacrament   b) formality   c) service
3. a) shrine   b) church   c) temple
4. a) licensing   b) consenting   c) permitting
5. a)preacher   b) lawyer   c) priest
6. a) ceremonial   b) sacred   c) religious
7. a)authorized   b) well-known   c) acceptable
8. a) formals   b) ceremony   c) rituals
9. a) validity   b) acceptability   c) accuracy
10. a) admitted by   b) overviewed by   c) acknowledged by
11. a) options   b) fundamentals   c) principles
12. a) monogamy   b) polygamy   c) unity
13. a) prohibited   b) accepted   c) permitted
14. a) families   b) cases   c) couples
15. a) live together   b) separated   c) divorced

Cultural Familiarity Questionnaire

Refer back to the cloze test 2 and cloze test 3 and then answer the following questions:
1. Identify your degrees of cultural familiarity with the cloze test 2 by selecting one of the following choices:
    a) I was really familiar
    b) I was familiar
    c) I was rather familiar
    d) I was not familiar
    e) I was not really familiar

2. Identify your degrees of cultural familiarity with the cloze test 3 by selecting one of the following choices:
    a) I was really familiar
    b) I was familiar
    c) I was rather familiar
    d) I was not familiar
    e) I was not really familiar

Interview on Students' Understanding

Part 1: in the following eight words from the cloze tests two and three are selected. Look at them carefully and then answer the following questions.

Words from cloze test 2:
        solemnizing   witness   polygamy   stipulation

Words from cloze test 3:

        authorized minister   priest   civil marriage   polygamy and polyandry

Question 1: State in a verbal form what was your understanding of these words while you were solving the items in cloze tests?
Question 2: State in a verbal form what did you think about the meanings of these words while you were solving the items in cloze tests?

You can refer back to the cloze tests if it is needed. You can state your report either in English or Persian as much as you want.