



**STRESS MANAGEMENT IN TAKING TESTS:  
THE ROLE OF EFL LEARNERS' STRESS COPING STRATEGIES IN  
THEIR TEST ANXIETY AND TEST-TAKING STRATEGIES**

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**Abstract:**

The purpose of the current study was to examine the effectiveness of some strategies (stress coping and test-taking strategies) in diminishing Iranian EFL learners' test anxiety. The sample consisted of 152 adult participants, 48 males and 104 females aged 20 to 35 with Persian as their first language. The instruments used in this study consisted of three questionnaires, the coping inventory for stressful situations (CISS), test anxiety questionnaire, and test taking strategy questionnaire. The results of path analysis demonstrated that among the coping strategies, task ( $\beta = .35$ ,  $t = 5.00$ ) and avoidance ( $\beta = .32$ ,  $t = 4.32$ ) are positive predictors of test-taking strategies and emotion negatively predicted test-taking strategies ( $\beta = -.21$ ,  $t = -3.26$ ). Test anxiety is influenced by task ( $\beta = -.17$ ,  $t = -2.18$ ) and avoidance ( $\beta = -.33$ ,  $t = -4.25$ ) negatively and positively by emotion ( $\beta = .23$ ,  $t = 3.43$ ). It was also found that test-taking strategies and test anxiety are negatively associated ( $\beta = -.25$ ,  $t = -3.17$ ). In addition, results of independent sample *t*-test showed that there is a significant difference between male and female students with respect to stress coping strategies, test taking strategies, and test anxiety. Finally, the findings were discussed with reference to the context of Iran.

**Keywords:** stress coping strategies, test-taking strategies, test anxiety, task, avoidance, emotion

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## 1. Introduction

It cannot be said decisively when or where the first formal test was given (Christmann & Badgett, 2008). As put by Foucault (1977), "*Through the test, the teacher, and later the policymaker defined what was expected of students and the test in turn forced students to reveal periodically how their learning was progressing. The written examination guaranteed the movement of knowledge from the teacher to the pupil, but it extracted from the pupil knowledge destined and reserved for the teacher, thus becoming a mechanism for exercising power over the pupil*" (p. 187). One of the main concerns of science education in the 21st century is establishing a convenient learning environment to make learners achieve academic success. One of the main barriers to attain this target is test anxiety. The term test anxiety has been characterized as "*the negative affect, worry, physiological arousal, and behavioral responses that accompany concerns about failure or lack of competence on an exam or similar evaluative situation*" (Matthews, Zeidner, & Roberts, 2006, p. 175). The topic of test anxiety has been observed in the literature since the early 1950's (Mandler & Sarason, 1952) and from the beginning it has been an important area of study (Bonaccio & Reeve, 2010).

Test anxiety has been a popular research field in Iran and many researchers investigated test anxiety from different viewpoints (e.g. Akbari, 2015; Jannati & Estaji, 2015, Javanbakht & Hadianb, 2014; Rezazadeh & Tavakoli, 2009; Shomoossi & Kassaian, 2009). Rezazadeh and Tavakoli (2009) designed a descriptive analytic study to investigate the relationship between gender, academic achievement, years of study and levels of test anxiety among 110 undergraduate students from University of Isfahan. The results indicated that female learners compared to males have a higher level of test anxiety. The average of test anxiety score among female students was higher. In addition, a significant negative correlation was found between learners' test anxiety and their academic achievement. There was no meaningful relationship between test anxiety and years of study. In addition, Shomoossi and Kassaian (2009) carried out a study to investigate the impact of test anxiety on listening and speaking. The results revealed that anxiety is an important factor in taking oral tests than in the listening comprehension tests. However, there was no significant difference between test anxiety before and after the listening comprehension test. Also, no relationship was found to exist between test anxiety and the general proficiency of students. In addition, Akbari (2015) in a correlational and cross-sectional study investigated the relationship between test anxiety and academic performance among psychology students. The results showed that there was a significant relationship between test anxiety and academic performance among psychology students.

Modern living has brought with it an extreme amount of stress among all socio economic groups of population. Now-a-days everyone experiences it, whether it is within the family, classroom, business, or any other environment. Although everybody wants stress-free life, it is an inevitable component of life due to increasingly competitive state among people (Nayak, 2008). According to Lazarus and Folkman (1984), stress coping strategies are the particular tactics that students may use to reduce stress when demands in their environments exceed their resources to manage such demands. They have been propounded that coping strategies have two main functions, governing the emotions relating to the stressors and managing the problem. Moreover, Lazarus and Folkman (1984) purported another coping strategy known as avoidant coping strategies which include avoiding the situation, denying its existence or losing hope. Avoidant coping strategies can be considered as abnormal coping strategies which cause health problems such as chronic heart diseases, impairment of memory, and asthma.

A number of studies have been carried out on the strategies used to cope with academic stress globally. Misra and Mckean (2000) did a research study exploring the possible association between academic stress, anxiety, time management and leisure satisfaction among university students. Their research predicted that students reported experiencing the aforementioned stressor during their academic studies were involved in leisure activities to deal with the stressors they encountered. In the same study by Misra and Mckean (2000), female students benefited less from leisure activities than male counterparts did in coping with stress, however female students had more effective time management or coping strategies than males and profited from them. In this light it can be viewed that leisure activities were used as coping strategies to deal with academic stress. Fram and Bovillian (2001) also found that students develop better thinking skills, including learning to use specific learning in a bid to deal with increased complexity of material to be learned and the greater time to do so. Hence, this shows that university students have to develop coping strategies that enable them to deal with academic stress. The use of social networks as a coping strategy by university to deal with stressful situations was supported by studies carried by Misra and Mackean (2000) at the University of Missouri in UK. According to a qualitative study at Monash University in Malaysia carried out by Redhwan *et al.* (2009) on second year students, students used a variety of strategies to cope with stress including academic related stress which included counseling, talking with their friends, mediation, sharing problems, sleep well and exercise. In this study, the students also used mediation such as yoga to deal with stress, as the majority of the students who participated in the study were Indians for whom yoga is commonly practiced. In another study Yosuff, Abdul

Rahim, and Yaacob (2010) examined the sources of stress among 761 medical students in one of the universities in Malaysia. The reports from the study revealed academic related stressors that posed stress on students as test and examination, large quantity of contents need to be learned, poor marks, inability to answer the teacher's questions, insufficient skill in medical practice, heavy workload and difficulty in understanding the questions. Besides, Bélanger, Sabourind, and El-Baalbaki (2012) investigated the relationship between specific coping strategies and problem-solving/communication behaviors in close relationships. The sample consisted of 72 couples who completed the dyadic adjustment scale and the marital coping questionnaire and who also participated in a filmed 30-minute discussion where they had to solve a relational problem. Findings revealed significant relationships between coping strategies, marital interaction, and marital adjustment among both men and women.

A number of studies have been carried out on the stress coping strategies in Iran. Moradia, Pishvab Bahrami Ehsana, Hadadia, and pouladia (2011) investigated the relationship between emotional intelligence and coping strategies. A total of 200 students completed measures of emotional intelligence (TMMS) and Coping Responses Inventory (CRI). The results revealed significant relationship between emotional intelligence and each of the five items of coping strategies in CRI. In addition, regression analysis showed that, emotional intelligence can significantly predict each of these five coping strategies (problem-solving, social support seeking, cognitive evaluation, somatic inhibition and emotional inhibition). In the same year, Sajadi, Khan mohamadi, Eskandari, Heidari, and Darbani (2011) considered the relationship between coping strategies, goal-setting and competitive anxiety with athletic performance of the students in single and group teams. The subjects were 170 boys selected at random out of high school students in 2008-2009. The results show that there was a significant relationship between task-based coping strategies with athletic performance of the students in group teams. Recently, Atrian, Ghanizadeh, and Rostami (2016) examined willingness to communicate in relation with self-regulation and coping strategies. Their study was conducted with 130 EFL university students enrolled in the English Language Teaching (ELT) Department of two universities in Iran. The main utilized instruments were the translated versions of WTC Questionnaire, the Self-Regulation Trait (SRT) Scale and Coping Inventory for Stressful Situations (CISS). The obtained results showed that among the subscales of coping strategies, task strategy had the highest correlation with WTC and self-regulation. Among the subscales of WTC, WTC in speaking displayed the highest correlation with task coping strategy. Furthermore, there was a moderate correlation between WTC and self-regulation.

In recent years, numerous researches were done to identify features that cause variation in test takers' performance on language tests (Barati & Kashkoul, 2011). According to Bachman (1990, p. 180) "*there are two systematic variations: a) variation due to differences across individuals in their communicative language ability (CLA), processing strategies and personal characteristics; and b) variation due to differences in the characteristics of the test methods or test tasks*".

Phakiti (2003, p. 39) maintained that "*test takers characteristics include personal attributes such as age, native language, culture, gender, background knowledge and cognitive, psychological and social characteristics such as strategy use, motivation, attitude, intelligence, anxiety, and socio-economic status*". Test taking strategies (TTS) are particular tactics used by learners during the process of learning which would help testees to do well on examination (Katalin, 2000). Skehan (1991) noted that "*all learners use strategies: what good learners do is to choose the right strategy for the right occasion*" (p.290).

Kher-Durlabhji and Lacina-Gifford (1992) expressed that specialists believe more research should be done on the importance of the role teachers should take in teaching test-taking strategies. A number of studies have been carried out on the Test-Taking Strategies in Iran. A research study was conducted by Yousofi, Pursiah, and Ahmadnejad (2015) to explore how test-taking strategies vary based on the learners' proficiency level. The findings showed that low-proficiency learners used mnemonic strategies more frequently than high-proficiency participants in completing both tests. In completing structure tests, high-proficiency participants employed mnemonic strategies more than cognitive and meta-cognitive strategies. In completing vocabulary test items, however, they drew almost equally on all three strategy types. The results also indicated that the low-proficiency participants did better in completing vocabulary test than high-proficiency participants did. Further, high proficiency participants performed better in structure tests than low proficiency participants did. The findings seem to indicate that foreign language learners rely more on mnemonic strategies than cognitive and meta-cognitive strategies due to their deficient competency in L2 knowledge.

In a recent study, Nemati (2016) explored the possible relationship between using teaching test-taking strategies and reading comprehension test performances. Thirty-three EFL sophomores studying at Islamic Azad University of Jahrom were selected for the study. They took two TOEFL reading comprehension subtests as pretest and posttest plus instruction in test-taking strategies for multiple-choice reading comprehension test within their regular reading classes. Results of the posttest demonstrated that the high proficiency learners took almost more advantage of the treatment compared with the low proficiency ones.

## 2. Purpose of the study

It is believed that there is a need for additional research regarding test-taking strategies as influenced by stress coping strategies and test-taking strategies, especially with Iranian students, since no study has been conducted so far on this issue in Iran. It is hoped that the present research will be a pioneer in this field that will facilitate further research. The findings of the present research may be utilized in designing future test anxiety intervention programs in the counseling centers of the educational institutions. If these strategies predict test anxiety, it will indicate that instruction of these strategies will be the basic concerns of the counselors dealing with test anxiety.

The following research questions are posed and investigated in the study:

1. Is there any significant relationship between SCS (stress coping strategy) and TA (test anxiety)?
2. Is there any significant relationship between SCS (stress coping strategy) and TTS (test taking strategy)?
3. Is there any significant relationship between TTS (test taking strategy) and TA (test anxiety)?
4. Are there any significant differences between male and female students with respect to stress coping Strategies, test anxiety, and test taking strategy?

## 3. Methodology

### 3.1 Participants

The sample consisted of 152 adult participants, 48 males (31.57%) and 104 females (68.42%) aged 20 to 35 ( $M = 26.62$ ,  $SD = 4.17$ ) with Persian as their first language. They were English learners of pre-intermediate to advanced proficiency levels who were studying at two private English language institutes (Safir Language Academy and Behaen Language Institute) in Mashhad, a city in north-eastern, Iran. The sample selection was based on convenience or opportunity sampling. According to Ary, Jacobs, Sorensen, and walker (2014), convenience sampling is the weakest procedure, but Dörnyei (2007) claims that it is the most common strategy at postgraduate research level and is largely practical, as it saves time, money, and effort, which results in having willing participants and rich dataset.

### 3.2 Instruments

The instrumentation in the present study consisted of three scales, the coping inventory for stressful situations (CISS), test anxiety questionnaire, and test taking strategy

questionnaire. The participants were also asked to write their age, gender, and achievement scores.

### **3.2.1 The adult version of the Coping Inventory for Stressful Situations (CISS)**

The adult version of the Coping Inventory for Stressful Situations (CISS) developed by Endler and Parker (1990) was utilized. This is a self-report paper and pencil measure of coping containing 48 items. Sixteen (16) items assess *task-oriented coping* and 16 items measure *emotion-oriented coping*. The *avoidance scale* (16 items) is divided into two subscales: *distraction* and *social diversion* (as cited in Ferdowsi & Ghanizadeh, 2017).

The CISS focuses on three major dimensions of coping in response to a stressful situation: Task-oriented, Emotion-oriented, and Avoidance-oriented coping. Task-oriented coping refers to responses directed at either problem resolution or cognitively reframing the meaning of the stressful situation (e.g. schedules my time better, focus on the problem and see how I can solve it, outline my priorities). Emotion-oriented coping refers to responses directed toward oneself rather than the problems at hand (e.g. blame myself for putting things off, feel anxious about not being able to cope, become very upset). An individual using this coping style may respond to a difficult situation by becoming emotionally distressed or engaging in fantasy activities. Avoidance-oriented coping refers to responses designed to avoid dealing with the stressful situation (e.g. try to be with other people, do what I think is the best, window shop, go out for a meal). Such attempts to deal with stress may take the form of either distracting oneself with other situations (e.g., shopping) or through interacting with other persons, forms of Avoidance-oriented coping that the authors conceptualized as a Task-oriented avoidance and Person-oriented avoidance, respectively (Endler & Parker, 1990, 1999). Table 1 displays the reliability indices (measured via Cronbach's alpha) of the questionnaire in the original study (Endler & Parker, 1990) and in the present study.

### **3.2.2 Test Anxiety Questionnaire**

Nist and Diehl (1990) developed a short questionnaire for determining if a student experiences a mild or severe case of test anxiety. To complete this evaluation, the students should read through each statement and reflect upon past testing experiences. Total Scores range from 10 – 50. 10-19 Points indicate that you do not suffer from test anxiety. In fact, if your score was extremely low (close to 10), a little more anxiety may be healthy to keep you focused and to get your blood flowing during exams. 20-35 Points shows that although you exhibit some of the characteristics of test anxiety, the level of stress and tension is probably healthy. Over 35 Points suggest that you are experiencing an unhealthy level of test anxiety. Some sample items of this questionnaire

are as follows: I read through the test and feel that I do not know any of the answers, my mind goes blank during a test, I have trouble sleeping the night before a test. Table 1 displays the reliability indices of the questionnaire in the original study (Nist & Diehl, 1990) and in the present study.

### 3.2.3 Test Taking Strategy Questionnaire

The strategy questionnaire was adapted from the questionnaire used by Rezaee (2006). This questionnaire includes 22 items. According to Rezaee (2006), in designing this questionnaire all the development process needed to design a questionnaire were meticulously attended to. For the content, the possible strategies which might be used by test takers were reviewed. In this five-point likert scale questionnaire , all five choices 'Never', 'Rarely', 'Sometimes', 'Frequently' and ' Always' were reaped after each statement. Participants need structure to choose one of the options for each statement. The one which exactly indicated the degree of using or not using a specific strategy mentioned in the statement at the time of responding the questions of the language test and there is no need to evaluate the correctness or incorrectness of statements in the questionnaire. Some sample items of this questionnaire are as follows: I answer the easy questions first and I leave the difficult questions until last, If two options imply the correctness of each other, I choose neither or both of items, In order to get a general idea of the text I survey it before reading it carefully. Table 1 displays the reliability indices of the questionnaire in the original study (Rezaee, 2006) and in the present study.

**Table 1:** The Reliability Indices of the Questionnaires

Factor	Number of Items	Reliability in the original study	Reliability in the present study
<b>Task-oriented</b>	16	.88	.90
<b>Emotion-oriented</b>	16	.77	.88
<b>Avoidance-oriented</b>	16	.89	.87
<b>Test Anxiety</b>	10	.95	.85
<b>Test-Taking Strategy</b>	22	.76	.91

### 3.3. Data Collection

The data collection was conducted in two private English language institutes in Mashhad, a city in northeast of Iran. The data collection of this study took place in January 2016. In this study, for collecting the data, questionnaires were distributed among English learner as a foreign language to be answered. To achieve reliable data, the researcher explained the purpose of completing the questionnaire and asked them



not to write a name on them. They were just required to provide demographic information such as, gender, age, and educational level. Therefore, students were assured that their answers would remain anonymous and their participation was not obligatory. To facilitate the process of data gathering and to make sure that all the participants would understand the intended meanings, the scales along with the instruction were presented in Persian (the participants' mother tongue). Statistical Package for Social Sciences (SPSS 20) was used for inputting data and computing descriptive statistics, reliability analysis of the instruments, conducting Pearson correlation, and independent sample t-test. LISREL 8.5 software was used to perform Structural Equation Modeling (SEM) or path analysis.

#### 4. Results

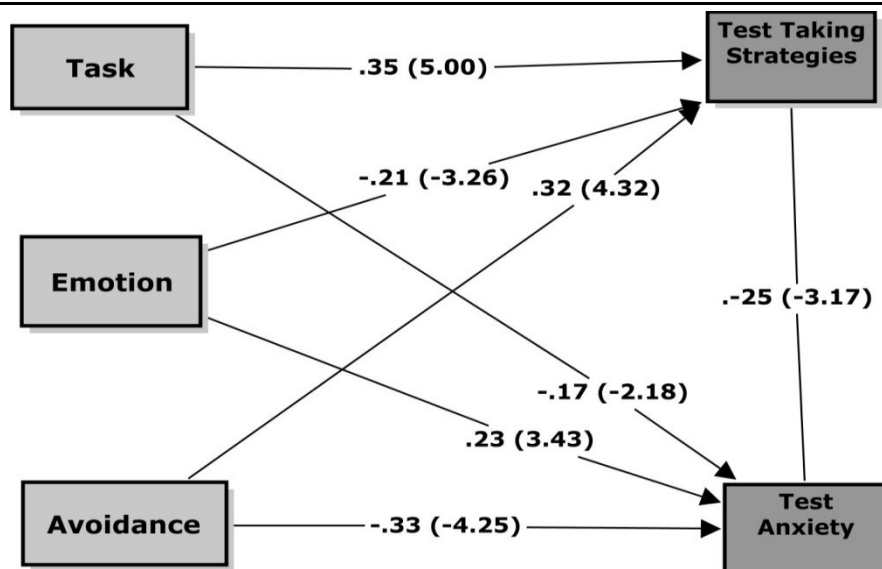
Table 2 presents descriptive statistics of EFL learners' coping strategies, test-taking strategies and test anxiety.

**Table 2:** Descriptive Statistics of Coping Strategies, test-taking strategies and test anxiety

	N	Minimum	Maximum	Mean	Std. Deviation
<b>Task</b>	152	33.00	76.00	56.2434	14.41394
<b>Emotion</b>	152	35.00	75.00	52.5197	13.29989
<b>Avoidance</b>	152	18.00	74.00	43.7829	20.27686
<b>Test taking strategies</b>	152	44.00	102.00	76.4474	20.43882
<b>Test anxiety</b>	152	18.00	48.00	31.1184	9.42586
<b>Valid N (listwise)</b>	152				

To examine the structural relations, the proposed model was tested using the LISREL 8.50 statistical package. A number of fit indices were examined to evaluate the model fit: the chi-square magnitude which shouldn't be significant, Chi-square/*df* ratio which should be lower than 2 or 3, the normed fit index (NFI), the good fit index (GFI), and the comparative fit index (CFI) with the cut value greater than .90, and the Root Mean Square Error of Approximation (RMSEA) of about .06 or .07 (Schreiber, et al., 2006). As demonstrated by Figure 1, all indices had acceptable magnitudes and the model had **perfect** fit with the empirical data.

To check the strengths of the causal relationships among the variables, the *t*-values and standardized estimates were examined.



$\chi^2= 0.00$ ,  $df= 0$ ,  $P\text{-value}= 1.00$ ,  $RMSEA=. 000$ ,  $GFI=1$   $NFI=1$ ,  $CFI=1$

**Figure 1:** The schematic representation of the relationships among coping strategies, test anxiety, and test-taking strategies

The results demonstrated that among the coping strategies, task ( $\beta= .35$ ,  $t= 5.00$ ) and avoidance ( $\beta= .32$ ,  $t= 4.32$ ) are positive predictors of test-taking strategies and emotion negatively predicted test-taking strategies ( $\beta= -.21$ ,  $t= -3.26$ ). Test anxiety is influenced by task ( $\beta= -.17$ ,  $t= -2.18$ ) and avoidance ( $\beta= -.33$ ,  $t= -4.25$ ) negatively and positively by emotion ( $\beta= .23$ ,  $t= 3.43$ ). It was also found that test-taking strategies and test anxiety are negatively associated ( $\beta= -.25$ ,  $t= -3.17$ ).

The correlation coefficients among EFL learners' coping strategies, test-taking strategies, and test anxiety are presented in Table 3. As it can be seen, test-taking strategies are positively and highly associated with task ( $r = 0.880$ ,  $p < 0.05$ ) and avoidance ( $r = 0.872$ ,  $p < 0.05$ ) and negatively with emotion ( $r = -0.841$ ,  $p < 0.05$ ). Test anxiety correlated negatively and highly with task ( $r = -0.865$ ,  $p < 0.05$ ) and avoidance ( $r = -0.805$ ,  $p < 0.05$ ) and is positively and highly associated with emotion ( $r = 0.852$ ,  $p < 0.05$ ).

**Table 3:** The Correlation Coefficients among EFL Learners Coping Strategies, Test-taking Strategies, and Test Anxiety

	1	2	3	4	5
1. Task	1.00				
2. Emotion	-.837	1.00			
3. Avoidance	-.871**	-.834**	1.00		
4. Test-taking strategies	.880**	-.841**	.872**	1.00	
5. Test anxiety	-.865**	.852**	-.805**	-.879**	1.00

\*\*Correlation is significant at the level of 0.01

To answer the last research question aiming at examining whether stress coping Strategies, test anxiety, and test taking strategy differ significantly between genders an independent-samples t-test was performed. Table 4 shows the descriptive statistics of males and females' scores in stress coping Strategies, test anxiety, and test taking strategy. Results of the independent-samples t-test is presented in Table 5.

**Table 4:** The Descriptive Statistics of Males and Females' Scores in Stress Coping Strategies, Test Anxiety, And Test Taking Strategy

	Gender	N	Mean	Std. Deviation
Task	F	104	53.2212	14.41342
	M	48	62.7917	12.17419
Emotion	F	104	55.5192	13.44747
	M	48	46.0208	10.43825
Avoidance	F	104	47.7308	20.91881
	M	48	35.2292	15.89760
TTS	F	104	72.3269	20.82728
	M	48	85.3750	16.50870
TA	F	104	32.8942	9.64810
	M	48	27.2708	7.70394

As the table indicates, female learners use emotion and avoidance strategies more than males. However, male learners, use task stress coping strategies more than females. Moreover, the mean score of male learners (85.37) in using test taking strategies is higher than females (72.32). In addition, the mean score of females (32.89) in test anxiety questionnaire is higher than males (27.27). Therefore, females are more anxious during test taking process. To find that these differences are significant statistically, t-test was run (see table 5).

**Table 5:** Results of the Independent-Samples T-Test

<i>t-test for Equality of Means</i>					
	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Task	-3.989	150	.000	-9.57	2.39
Emotion	4.326	150	.000	9.49	2.19
Avoidance	3.677	150	.000	12.50160	3.40008
TTS	-3.820	150	.000	-13.04808	3.41608
TA	3.548	150	.001	5.62340	1.58508

Levene's test indicated homogeneity of variance on stress coping Strategies, test anxiety, and test taking strategy scales. As indicated in Table 5, there are significant

differences between gender, and three scales of stress coping strategies: task ( $t=-3.98$ ,  $p<0.05$ ), emotion ( $t= 4.32$ ,  $p<0.05$ ), avoidance ( $t=-3.67$ ,  $p<0.05$ ) test anxiety ( $t=-3.82$ ,  $p<0.05$ ), and test taking strategy ( $t=3.54$ ,  $p<0.05$ ).

## 5. Discussion

The results of the present study displayed that test anxiety is influenced by task and avoidance negatively and positively by emotion. In addition, the results of Pearson correlation indicated that test anxiety correlated negatively and highly with task and avoidance and is positively and highly associated with emotion. This result is in line with the large body of research linking academic stress to test anxiety (Aldwin & Greenberger, 1987; Leung, Yeung, & Wong, 2010).

As mentioned before, the task-oriented strategy is problem-focused (e.g. scheduling the time better, focusing on the problem to solve it, outlining the priority, etc.). It involves taking direct action to alter the situation itself to reduce the amount of stress it evokes. So it is completely logical when the testees are anxious during a test, they do their best to alter the situation by emphasizing on the task or planning to solve the problem. Therefore, this relationship is negative. In addition, avoidance-oriented coping includes strategies such as avoiding the situation, denying its existence, or losing hope (e.g. trying to go to sleep, going out for a meal, going to a party, etc.) (Lazarus & Folkman, 1984). It also includes the use of indirect efforts to adjust to stressors by distancing oneself, evading the problem, or engaging in unrelated activities for the purpose of reducing feelings of stress (Roth & Cohen, 1986). Therefore, highly test-anxious students use these kinds of strategies to avoid the stressful situations. As there is not any study in the literature regarding the relationship between stress coping strategy and test anxiety, comparatively discussing this result is not possible. However, In the emotion-oriented strategy, endeavors are guided at adjusting emotional responses to stressors. It also additionally incorporates endeavors to reframe the issue in such a way that it never brings out a negative emotional response and inspires less anxiety (Mattlin, 1990).

As Endler and Parker (1999) stated, despite the fact that the main purpose of this strategy is also to diminish stress, this is not always successful. In some cases, it even expands stress. Reactions include emotional responses (e.g. blame myself for being too emotional, get angry, feel anxious, and become very tense). Thus, the testees who are getting anxious and stressful during a test are emotionally more fragile. In other words, as the state anxiety levels of the testees increase, their level of emotionality responses regarding test anxiety increase. This result is consistent with the findings of a study

conducted by Hashemi (2011). He explored the relationship between level of language stress and anxiety among Iranian English language learners. He found that language anxiety can originate from learners' own sense of self, their self-related cognitions, language learning difficulties, differences in learners and target language cultures, differences in social status of the speakers and interlocutors, and from the fear of losing self-identity. In addition, Emmioglu and Capa Aydin (2008) found that self-blaming and wishful thinking are significant predictors of test anxiety uniquely accounting for 6.8% and 1.6% of the variability. The relationship between them indicated that the more students engaged in wishful thinking strategies and the more they blamed themselves for bad performance in tests, the higher the test anxiety was.

The results of path analysis indicated that among the coping strategies, task and avoidance are positive predictors of test-taking strategies and emotion negatively predicted test-taking strategies. Besides, the results of Pearson correlation indicated that test-taking strategies are positively and highly associated with task and avoidance and negatively with emotion. The positive correlation between these stress coping strategies and test taking strategy indicates that the more students engaged in test taking strategies, the more they can cope with the situational stress. In other words, it can be concluded that learning and utilizing different strategies can be accounted as one of the ways that decreases the stressor during taking test. So, learners' use and domination on test-taking strategies can help them to cope better with stress. As there is not any study in the literature regarding the relationship between stress coping strategy and test taking strategy, discussing the yielded results in accordance with other studies is not possible. It is hoped that the present research will be a pioneer in this field facilitating further research.

The results demonstrated that test-taking strategies and test anxiety are negatively associated. This result was also confirmed with Pearson correlation. The results of analysis of data with SPSS showed that there is a high negative relationship between test-taking strategies and test anxiety. As the results revealed, the more students engaged in test taking strategies, the lower the test anxiety was. In other words, the learners who utilize different strategies during a test have lower level of anxiety. As indicated in the results, there is a significant difference between gender and all subscales of coping strategies. As the table of descriptive statistics indicated, female learners used emotion and avoidance strategies more frequently than males. However, male learners, used task stress coping strategies more than females.

These results are in agreement with other studies (e.g., Madhyastha, Latha, & Kamath (2014), Ptacek, Smith, & Dodge, 2016, Ghanizadeh & Jahedizadeh, 2015a). Madhyastha, Latha, and Kamath (2014) estimated the prevalence of stress and

examined gender differences in stress experience and coping among 94 third year medical students. The results showed that females had more academic performance stress than males. Among coping strategies, support seeking was more in females as shown by the increased use of instrumental support seeking (problem-focused) and emotional support seeking (emotion-focused) in comparison to males. Humor, a positive emotion-focused strategy and self-blame, a maladaptive strategy, were used more by males. In addition, in a study conducted by Ptacek, Smith, and Dodge (1994), it was found that although men and women were similar in their cognitive appraisal of the situation, they nonetheless reported differences in preparatory coping. Females reported higher seeking social support and using emotion-focused coping than males, whereas males reported using relatively more problem-focused coping than females.

Nevertheless, the results are inconsistent with a study conducted among university students in Botswana., Monteiro, Balogun, and Oratile (2014) explored the impact of gender, age and emotion regulation on coping strategies among university students. Female learners reported wishful thinking and problem-focused (task) disengagement more than males; however, there were no other significant gender differences in coping strategies (as cited by Subramanyam, Srinivasa, & Rao, 2016).

The results showed that there is a significant difference between gender and test taking strategies. The mean score of male learners (85.37) in using test taking strategies was higher than females (72.32). The result is not consistent with Nourdad's study (2014) which explored gender differences in various EFL majors in the way test takers apply test-taking strategies and their ultimate reading comprehension test performance. For this purpose, 214 male and female EFL students participated based on convenience sampling and participated in the study. The findings of *t*-test and one-way ANOVA revealed that there are neither gender nor major differences in any of cognitive or metacognitive test-taking strategies and EFL reading test performance.

The results showed that there is a significant difference between gender and test anxiety. The mean score of females (32.89) in test anxiety questionnaire was higher than males (27.27). Therefore, females appear to be more anxious during test taking process. The findings of this research suggest that gender differences are significant where female EFL students showed a significantly higher level of test anxiety than their male counterparts. According to Eman *et al.* (2012) female students appear to be more prone to test anxiety and examination stress, perhaps because of the Eastern culture which urges them to be more expressive. Furthermore, it seems that females more than males experienced test anxiety and stress when they want to prove their value in academics particularly when the society discourages their right to higher education and makes them feel intellectually inferior to men. This finding is in accordance with Freud's (1936)

theory about anxiety which says an important type of anxiety is delivered because of danger to the ego (Freud, 1936).

This result concurs with the findings of some relevant previous studies (Chapell, Blanding, Silverstein, Takahashi, Newman, Gubi, & MaCann, 2005; Eman, Dogar, Khalid, & Haider, 2012; Rezazadeh & Tavakoli, 2014; Sideeg, 2015). Findings of Chapell et al. (2005) supported the controversial hypothesis that female students experience more severe test anxiety than male counterparts. In addition, Eman, Dogar, Khalid, and Haider (2012) assessed and compare the level of test anxiety and examination stress among males and females university students. Results indicated that Female students experience significantly higher level of test anxiety, as compared to male students. In addition, female students reported a significantly higher level of need for family support as compared to male students. Moreover, in a study conducted by Rezazadeh and Tavakoli (2009) in Iran, the findings revealed that female students have a higher level of test anxiety in contrast to male students. The average of test anxiety score among female students was higher. Also a statistically significant negative correlation was observed between test anxiety and academic achievement. Sideeg (2015) reported that there is a significant difference between levels of test anxiety according to gender difference. Female students had significantly higher level of test anxiety.

## 6. Conclusions

This study examined the relationship between test anxiety, stress coping strategies, and test-taking strategies among Iranian EFL male and female learners. According to the findings of the study, it is possible to conclude that among three sub factors of stress coping strategies (i.e. task, avoidance, and emotional strategies), task and avoidance strategies revealed negative relation with test anxiety and positive relation with test-taking strategies. However, emotional strategies indicated positive relation with test anxiety and negative relation with test taking strategy. Summing up the results, it can be concluded that the more students engaged in wishful thinking strategies and the more they blamed themselves for bad performance in tests, the higher the test anxiety was. Moreover, the more students engaged in test taking strategy, the lower the test anxiety was. In addition, the positive correlation between these stress coping strategies and test taking strategy indicates that the more students engaged in test taking strategies, the more they can cope with the situational stress. It can be inferred that learning and using different taking strategies, can be accounted as one of the ways that diminishes the stressors during taking test. In this way, students' application and control on different test-taking strategies can assist them to cope better with test stress.

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