

An Investigation into the Relationship Among Self-Efficacy, Self-Esteem, Test Anxiety and Final Achievement of English Literature Students

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Abstract. The purpose of this study was to investigate the relationship among self-efficacy, self-esteem, test anxiety and EFL learners' final achievement scores. A number of 72 students majoring in English Literature at Shiraz University participated in this study. Three questionnaires, General Perceived Self-Efficacy (GPSE) Scale, Rosenberg Self-Esteem Scale (RSES), and Test Anxiety Questionnaire (TAQ), together with a final achievement score were used. Correlational analyses were run to determine the relationship among the variables. The obtained results revealed that self-esteem had a positive correlation with self-efficacy, while the relationship between self-esteem and test anxiety was seen to be non-significant. The same was true about the relationship between self-efficacy and test anxiety. Moreover, a moderate, positive, relation was observed between self-efficacy and students' final scores. There was a positive correlation between self-esteem and students' final scores. However, test anxiety and students' final scores were negatively correlated. A linear regression analysis was also employed which showed that self-efficacy was the best predictor of students' final achievement scores. The findings of Pearson Product-Moment Correlation revealed that, regarding the relationship among the variables, there was a difference between male and female students. Finally, an independent samples *t*-test was run to show the effect of gender on the performance of the participants. Male and female students did not significantly differ from each other in terms of self-efficacy, self-esteem, test anxiety, and final achievement scores.

Keywords: Self-efficacy, self-esteem, test anxiety, achievement score

Received: July 2013; Accepted: October 2013

1. Introduction

Education is the most vital enterprise. In the educational setting, evaluation and measurement are needed for decision-making. One of the methods of evaluation is the use of direct observation of the pupil performance, and the examination of written work may be the most valid procedure in favor of the evaluation (Lindvall, 1961). Students' performance and their academic achievement are directly or indirectly related to many factors (Akbas and Kan, 2007). Students' aspirations, their level of interest in academic activities, and their academic accomplishments are influenced by their beliefs in their capabilities to master academic activities (Bandura, 1994). According to Bachman (1990), in order to estimate the reliability of test scores, a set of definitions of the abilities to be measured should be provided as well as the factors which may affect test scores. These factors include test method facets, personal attributes and random factors. Affective domain plays an emergent role in the classroom.

The affective domain, according to Tuchman (1975), refers to "the emotional or feeling aspects of human functioning in contrast to the thinking or performing aspects" (p. 139). Personality factors are the intrinsic side of affective domain (Brown, 2000). Among these personality factors, self-esteem, anxiety, self-efficacy, motivation, empathy, and risk taking are introduced (Brown, 2000). Self-efficacy, self-esteem and anxiety have moved into the focus of this research.

Efficacy beliefs determine outcome expectations. Investigators have reported that students' self-efficacy is interrelated with other motivation constructs and with students' academic performance and achievement. Constructs in these studies have included attributions, goal setting, modeling, problem solving, domain-specific anxiety, self-regulation, and varied academic performances across domains (Pajares, 1996). Pajares and Miller (1994) define self-efficacy as "a context-specific assessment of competence to perform a specific task, a judgment of one's capabilities to execute specific behaviors in specific situations" (p. 194). Bandura (1997), states that a high sense of efficacy is required to make effective decisions.

From William James' pioneer work in 1890 up to now, there exist thousands of studies that report the influence of self-esteem on human behavior (Rubio, 2007). The difference between self-efficacy and self-esteem is illustrated by Gist and Mitchell (1992, cited in Tschannen-Moran, Hoy, and Hoy, 1998). "Self-esteem usually is considered to be a trait reflecting an individual's characteristic affective evaluation of self (e.g., feelings of self-worth or self-liking" (p. 185). In contrast, "Self-efficacy is a judgment about task capability that is not inherently evaluative". Self-esteem in individuals has an effect on inclusion and achievement. According to Hamachek (1978), self-esteem might be considered as the affective portion of the self, that is, having certain ideas and feelings about who we are. He puts forward that "Our self-esteem, then, refers quite literally to the extent to which we admire or value the self" (p. 3).

Test anxiety as a personality variable is related consistently to the measures of academic aptitude and achievement, contributing to the prediction of complex behavior, such as performance on examinations (Gaudry and Spielberger, 1971). Bachman (1990) states that "a test is a measurement instrument designed to elicit a specific sample of an individual's behavior" (p. 20). The Longman Dictionary of Language Teaching and Applied Linguistics defines a test as any procedure for measuring ability, knowledge, or performance (Richards & Schmidt, 2002). Lado (1961) defines achievement tests as those which measure how much of a foreign language a student knows.

2. Research Questions

The study seeks answers to the following questions:

1-Is there any relationship among self-efficacy, self-esteem and test anxiety of undergraduate students of English Literature?

2-Is there any relationship among self-efficacy, self-esteem, or test anxiety and final achievement scores?

3-Can self-efficacy, self-esteem and test anxiety predict final achievement scores? If yes, which one has the most predictive power?

4-Is there a difference between male and female students in terms

of the relationship between self-efficacy, self-esteem or test anxiety and their final achievement scores?

3. Literature Review

Literature on self-efficacy is very rich. Pajares (1996) demonstrated the contribution made by self-efficacy component of Bandura's (1986) social cognitive theory to the study of self-regulation and motivation in academic settings. Phan and Walker (2000) presented a study to examine the predictive and meditational role of self-efficacy on performance. Self-efficacy beliefs were found to predict performance. Bandura and Locke (2003) investigated the functional properties of self-efficacy beliefs and the way self-efficacy beliefs operate within a socio-cognitive theory of self-regulation. Evidence from methodological and analytic strategies proved that perceived self-efficacy and personal goals enhance motivation and performance attainment. This contradicts findings that beliefs in one's capabilities and personal goals is self debilitating (Vancouver, Thompson, & Williams, 2001; Vancouver, Thompson, Tischner, & Putka, 2002, all cited in Bandura and Locke, 2003).

There is a growing research on self esteem. Results of the study by Green (1974) provided some partial support for the postulate that low self-esteem retardates, as compared to high self-esteem retardates, manifested an enduring motivation to fail rather than succeed at achieving the ambitious role. Giuliani (1997) attempted to examine the difference in the self-esteem and academic performance of college students who came from divorced families versus those from intact and/or single-parent families. The findings displayed no difference between them. One research by Jones (1997) academic team members had significantly higher self-esteem scores. In other words, students' self-esteem was influenced by academic team participation. The likelihood of higher self-esteem scores among students, who were participating in academic teams, would be appropriate. Walter (2003) reported a significant relationship between academic performance and overall self-esteem in his study which attempted to reevaluate and assess the relative contributions of academic performance, academic achievement, and social acceptance to the self-esteem of children.

Kight and Sassenrath (1966) found the influence of achievement motivation and test anxiety on performance in programmed instruction. The results showed that students with high achievement motivation had a better performance on all criteria than low achievement motivated students. High-test-anxiety students also performed faster and made fewer errors comparing to low-test-anxiety students, but failed to obtain higher retention scores. Rasor and Rasor (1998, cited in Shomoossi, Kooshan, Ketabi, 2008) in their study of test anxiety in relation to ethnicity, gender, and age reported that female students had more test anxiety compared to the males. Rich (2004) attempted to examine the development of deductive reasoning across adolescence, and the relation of reasoning to test anxiety and standardized test scores. Test anxiety was not related to reasoning performance. Chen (2007) investigated the relationship between test anxiety and reading anxiety on Taiwanese students' performance in reading. A low correlation was found between reading performance and test anxiety and between reading performance and reading anxiety in EFL learners.

Walsh (1956, cited in Hamachek, 1978) found that bright boys who were low-achievers had more negative feelings than did high-achievers. A strong significant negative relationship was found between self-concept and academic under-achievement which was stronger for boys than for girls. (Fink, 1962, cited in Hamachek, 1978). Sanchez and Roda (1998) obtained a close relationship between academic self-concept and measure of academic performance. The total self-concept and academic self-concept were found as good predictors of general performance. Ashtiani, Ejei, Khodapanahi, and Tarkhorani (2007) had a survey of personality characteristics of adolescents and their associations with academic achievement. Findings indicated that self-concept was correlated with self-esteem and these two had positive impacts on argument of academic achievement.

4. Method

4.1 Participants

The participants in the study consisted of junior undergraduate students majoring in English Literature at the Department of Foreign Languages

and Linguistics of Shiraz University. A total number of 72 students took part in this research.

4.2 Instrumentation

Three instruments were used in this study. General Perceived Self-Efficacy (GPSE) Scale developed by Jerusalem and Schwarzer (1981, cited in Ghoreishi, 2003) to assess the subjects' GPSE. This questionnaire was made up of 10 items and was considered as a reliable, valid, popular, and well-established questionnaire with Cronbach's alpha ranging from .76 to .90.

The second instrument was Rosenberg Self-Esteem Scale to measure the global self-esteem (Rosenberg, 1965 cited in Tahriri, 2006). This scale consists of ten items in a four-point Likert scale. Silbert and Tippet (1965) presented an index of reliability of .85 based on a two-week test-retest coefficient correlation. McCarthy and Hoge (1982) obtained a Cronbach's alpha of .74.

The third instrument was Test Anxiety Questionnaire developed by Nist and Dieh (1990) to determine if a student experiences mild or severe test anxiety. The questionnaire used a five-point Likert scale. The researcher herself found an index of reliability of .897. Final achievement tests were also gathered in the Literary Prose course to measure the degree of students' learning from a particular set of instructional materials.

4.3 Procedures

For the ease of administration, both General Perceived Self-Efficacy (GPSE) Scale and Test Anxiety Questionnaire were translated. Two experts were asked to translate the items and then a back translation was done by the researcher herself. Then two graduate students were asked to compare the original questionnaires and the back translation to ensure the accuracy of the translation. All the questionnaires were given to the students at a single session in thirty minutes. The final achievement test scores were obtained from the instructor who taught the course, prepared the achievement tests, and scored the students' papers.

4.4 Analysis

SPSS 16.0 was utilized for the sake of data analysis. To find out the relationship among learners' self-efficacy, self-esteem and test anxiety, and their relationships with achievement scores, correlational analysis was performed. Moreover, to make a prediction about participants' final achievement scores from their self-efficacy, self-esteem and test anxiety, a linear regression analysis was employed. Finally, to investigate the effect of sex on the relationship between self-efficacy, self esteem, and test anxiety on the one hand, and final achievement scores on the other hand, correlational analyses were employed separately for each sex. To see if gender made a difference in the performance of the participants, an independent samples *t*-test was employed.

5. Results and Discussion

5.1 Correlational analyses

To test the relationship among learners' self-efficacy, self-esteem, and test anxiety, and the relationship between students' self-efficacy, self-esteem, or test anxiety and students' final achievement scores, the data were subjected to Pearson Product-Moment Correlation. The results are presented in Table 1.

Table 1: Correlations among SE, SEF, and TA

	SEF	TA	score
Pearson Correlation	.662**	-.216	.476**
SE Sig. (2-tailed)	.000	.069	.000
N	72	72	72
Pearson Correlation		-.212	.638**
SEF Sig. (2-tailed)		.074	.000
N		72	72
Pearson Correlation			-.378**
TA Sig. (2-tailed)			.001
N			72

As the table indicates, for all the participants (N=72), self-esteem has a high positive and significant correlation with self-efficacy ($r = .662, p <$

.01). This would signify that if the students have higher self-esteem, there is a major possibility that they indicate higher self-efficacy too. This result is consistent with the findings of Sadeghi and Vasudeva (2006) who found that employed women reported significantly higher self-efficacy and self-esteem than unemployed ones. The relationship between self-esteem and test anxiety is seen to be non-significant ($r = -.216, p > .01$). No relationship can be seen between self-efficacy and test anxiety either ($r = -.212, p > .01$). Test anxiety, a state of impatience and agitation, is not associated with self-efficacy which is defined as the beliefs about persons' capabilities to learn or perform behaviors.

The correlation between self-efficacy and students' final scores is moderate, positive, and significant ($r = .638, p < .01$). It can be inferred that students with high self-efficacy were better performers in their examinations than their other peers. This conclusion is consistent with the results reported by other researchers who concluded that self-efficacy had a main contribution to the students' academic achievement (Kabiri, Kiamanesh, and Hejazie 1995, Pajares 1997, and Malpass, O'Neil). This finding reflects Bandura's report (1986, cited in Pajares, 1996) that efficacy beliefs establish outcome expectations. There may be some possible justifications on the findings attained. Students who believe in themselves and are sure about their academic skills look forward to high marks on exams and expect the quality of their work to be high. They imagine continued good grades and academic achievement. In contrast, those who are deficient in such confidence visualize low marks, and academic failure before they start an exam. Students who possess high self-efficacy set higher purposes for themselves, make use of more well-organized problem-solving approaches, and achieve higher academic performance in contrast with the students that are poor in such potentials.

There is a positive and significant correlation between self-esteem and students' final scores ($r = .476, p < .01$). Therefore the students who experienced higher self-esteem also got higher achievement scores. This is similar to the conclusion found by Chappell (1994) that self-esteem was directly related to high academic achievement. This can also support the result found by Krutsinger (1996) that a statistically signifi-

cant correlation exist between achievement scores and scores obtained on the Coopersmith self-esteem inventory of Junior high school. This contrasts with Bradley (2000) who concluded that there was no relationship between measures of either global self-esteem or specific self-esteem and academic achievement. In addition, Chen (2000) found no relationship between self-esteem and academic achievement. Test anxiety and students' final scores are negatively and significantly correlated ($r = -.378, p < .01$). This means that people with low test anxiety scores tended to score higher than those with high test anxiety. This is supportive of other findings reported by other scholars who maintained that a high level of test anxiety would interfere with performance whereas a low level of test anxiety would smooth the progress of performance (Yang, 1992; Hayati and Ostadian, 2008).

5.2 Regression analysis

In order to predict final achievement scores from self-efficacy, self-esteem, or test anxiety, a linear regression analysis was employed. The results indicate that 47% of the variance in the students' final scores is explained by the combination of self-esteem, self-efficacy, and test anxiety. To see if this is statistically significant, it is necessary to refer to ANOVA results. Only two variables, i.e. self-efficacy and test anxiety have significance levels of .000 and .008. In other words, only self-efficacy and test anxiety have been able to predict the variance in students' scores. Self-esteem was not a good predictor in this respect ($p = .597 > .05$). Self-efficacy has a higher Beta value than test anxiety. Therefore, the best predictor of success in achievement test is self-efficacy. The Beta value is .544, which means that one standard deviation unit change in the score for self-efficacy would result in .544 units of change in the achievement score. This unit of change for test anxiety would be -.249. Thus, self-efficacy is a better predictor of students' scores than test anxiety (.544 > -.249). Consequently, self-efficacy can be considered as the best positive predictor of students' final achievement scores however, test anxiety is a negative moderate predictor. Self-esteem cannot be regarded as a predictor of final achievement scores.

5.3 Gender effect

To measure the effect of sex on the relationship between self-efficacy, self-esteem, and test anxiety and final achievement scores first, a split file was carried out to sort the data according to their sex. After that, the Pearson Product-Moment Correlation was calculated to illustrate the relationship between them.

Table 2: Correlations among SE, SEF, and TA for males

		SEF	TA	score
	Pearson Correlation	.366	.081	.638*
SE	Sig. (2-tailed)	.242	.802	.025
	N	12	12	12
	Pearson Correlation		.255	.674*
SEF	Sig. (2-tailed)		.424	.016
	N		12	12
	Pearson Correlation			.118
TA	Sig. (2-tailed)			.715
	N			12

As Tables 2 and 3 indicate, the relationship among self-efficacy, self-esteem, test anxiety and final achievement scores for the male participants ($N=12$) is non-significant ($r = .366$, $p > .05$). Self-esteem and self-efficacy for female students ($N=60$) were found to have a positive and significant correlation ($r = .697$, $p = .000$). Self-esteem and test anxiety have no significant correlation either for male students ($r = .081$, $p > .05$). This is the case for the female students as well ($r = -.241$, $p = .063$).

The same is true about the relationship between self-efficacy and test anxiety for males ($r = .255$, $p > .05$). Self-esteem and male students' final achievement scores are positively and significantly correlated ($r = .638$, $p < .05$). Accordingly, the students with higher self-esteem would probably have higher scores too. The correlation between self-

efficacy and male students' final achievement scores is high, positive, and significant ($r = .674, p < .05$). As a result, a raise in male students' self-efficacy would be associated with an increase in their achievement scores. Test anxiety and students' final scores are not significantly related ($r = .118, p > .05$).

Table 3: Correlations among SE, SEF, and TA for females

	SEF	TA	score
Pearson Correlation	.697**	-.241	.459**
SE Sig. (2-tailed)	.000	.063	.000
N	60	60	60
Pearson Correlation		-.258*	.620**
SEF Sig. (2-tailed)		.046	.000
N		60	60
Pearson Correlation			-.465**
TA Sig. (2-tailed)			.000
N			60

** . P< 0.01 level (2-tailed).

* . P< 0.05 level (2-tailed).

a. sex = female

Self-esteem and final scores had a positive correlation ($r = .638, p = .025$) for the male students. Among the male students, those of high self-esteem performed much better than those of low self-esteem. This is consistent with the female group too. Self-esteem and final scores were positively and significantly correlated for them ($r = .459, p = .000$). This correlation is more significant for the females ($.000 < .025$), but higher for males ($.638 > .459$). The correlation between self-efficacy and students' final scores was high, positive, and significant for male group ($r = .674, p = .016$).

The low self-efficient male students had poor performance; however the high self-efficient ones performed better. This result is analogous to the result obtained by investigating the relationship between self-efficacy and females' final scores. These two variables were moderately, positively, and significantly correlated ($r = .620, p = .000$). This relationship is found to higher for males ($.674 > .620$). Accordingly, pertaining to the relationship between self-efficacy and students' final scores,

males and females did not perform in a different way.

There was a non-significant relationship between test anxiety and males' final scores ($r = .118, p = .715$). On the contrary, the correlation between these two variables was negative, significant for female group ($r = -.465, p = .000$). It can be concluded that high test anxious females were poor performers than those with low test anxiety. Scovel's discussion (1978) of facilitating anxiety and debilitating anxiety is capable of supporting this difference. Facilitating anxiety stimulates an individual to positively deal with complexities. On the contrary, debilitating anxiety tends to weaken individual's learning outcome and demoralizes the required self confidence. The females in this study had debilitating anxiety that hindered their achievements.

Therefore, there is no significant difference between males and females in terms of the relationship between their self-efficacy, self-esteem, test anxiety, and final achievement scores. This finding is similar to Emil's result (2003) who reported no significant difference between male and female on the self-esteem score. Hembree's findings (1998) contrast with the result in the present study in which he found that females presented higher test anxiety than males, and scored lower on the achievement test (cited in Davis, Distefano, 2008). This disagrees with the outcome by Shomoossi, Kooshan, Ketabi (2008) who reported a reverse relationship between test anxiety and achievement score in which boys were more anxious than the girls, consequently, they had lower achievement score in the final exam.

To see if gender made a difference in the performance of the participants or not, independent samples t-test was employed. As can be seen in Table 4, none of the comparisons yielded significant results. In other words, male and female students did not significantly differ from each other in terms of self-efficacy, self-esteem, test anxiety, and final achievement scores.

Table 4: Independent samples t-test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference
SE	Equal variances assumed	1.746E0	.191	-.516	70	.607	-.700
	Equal variances not assumed			-.653	21.159	.521	-.700
SEF	Equal variances assumed	1.688E0	.198	-1.709E0	70	.092	-3.200
	Equal variances not assumed			-1.938E0	18.049	.068	-3.200
TA	Equal variances assumed	2.151E0	.147	.418	70	.677	.733
	Equal variances not assumed			.513	20.157	.614	.733
score	Equal variances assumed	.349	.556	-1.768E0	70	.081	-1.17917
	Equal variances not assumed			-1.557E0	14.173	.141	-1.17917

6. Conclusion

Self-esteem and self-efficacy have a high, positive, and significant rela-

tionship. Therefore, the students with higher levels of self-esteem have higher levels of self-efficacy and the students with low self-esteem have lower self-efficacy. Self-esteem and test anxiety have a non-significant relationship. The same is true about self-efficacy and test anxiety. The results also pointed out that students with higher self-efficacy, higher self-esteem, and lower test anxiety were found to get higher test scores. This outcome can be advantageous for the students by conducting them to make an effort to increase their self-efficacy and self-esteem and decrease their test anxiety. Both self-efficacy and test anxiety predict students' final achievement scores, but not self-esteem. As a consequence, among the three factors, self-efficacy and test anxiety are the predictors of students' scores. In order to predict one's final achievement score, self-efficacy and test anxiety can be estimated. Higher self-efficacy and lower test anxiety predict a good final score. Self-efficacy is the best predictor of final achievement scores among the three factors. The teachers should develop collective beliefs about the capability of their students to enhance their self-efficacy. There was not a significant difference between male and female students in terms of the relationship between self-efficacy, self-esteem or test anxiety and their final achievement scores. Researchers and investigators can benefit from this study by obtaining more insights to the factors examined. They are recommended to conduct more studies with reference to the affective factors which can be related to achievement scores.

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References

- Akbas, A. & Kan, A. (2007). Affective factors that influence Chemistry achievement (motivation and anxiety) and the power of these factors to predict Chemistry achievement. *Journal of Turkish Science Education*, 4 (1), 10-19.
- Ashtiani, A. F., Ejei, J., Khodapanahi, M. K., & Tarkhorani, H. (2007). Relationship between self-concept, self-esteem, anxiety, depression and academic achievement in adolescents. *Journal of Applied Sciences*, 7 (7), 995-1000.
- Bachman, L. F. (1990). *Fundamental considerations in language testing*. New York: Oxford University Press.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior*, (Vol. 4, pp. 71-81). New York: Academic Press. Retrieved 11 February, 2008 from:
<http://www.des.emory.edu/mfp/BanEncy.html>.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and Company.
- Bandura, A. & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*. 88 (1), 87-99.
- Bradley, Ch. S. (2000). *Does self-esteem contribute to good grades at the college level? A sociological examination of the factors that impact academic performance in college*. MA thesis.
- Brown, H. D. (2000). *Principles of language learning and teaching*. San Francisco: Pearson Education.
- Chappell, P. D. (1994). *Human figure drawings, self-esteem, and their relationship to school achievement in the primary grades*. Ph.D thesis, the University of Memphis.
- Chen, M. L. (2007). *Test anxiety, reading anxiety and reading performance among university English as second language learners*. MA thesis, Ming Chuan University, Ming Chuan, China.
- Gaudry, E. & Spielberger, C. D. (1971). *Anxiety and educational achievement*. Adelaide: The Griffin Press.

- Giuliani, G. A. (1997). *The relationships among parental marital status, self-esteem and academic performance in commuter college students*. Ph.D thesis, The State University of New Jersey, New Brunswick, New Jersey.
- Green, R. K. (1974). *The relationship between level of self-esteem and ambitiousness among institutionalized retardates*. Ph.D thesis, Texas Tech University.
- Hamachek, D. E. (1978). *Encounters with the self*. Michigan: Library of Congress.
- Hayati, A. M. & Ostadian, M. (2008). The relationship between self-esteem and listening comprehension of EFL students. *Glossa*, 3, 300-312.
- Jones, P. L. (1997). *The effects of academic team participation on sat scores and self-esteem of high school students*. Ph.D thesis, University of Georgia, Athens, Georgia.
- Kabiri, M., Kiamanesh, A. R., & Hejazi, E. (1995). *The role of personal variables in Math achievement: A social-cognitive theory perspective*. Retrieved 7 February, 2008 from: <http://www.iranpa.org/JCP/JCP>.
- Kight, H. R., & Sassenrath, J. M. (1966). Relation of achievement motivation and test anxiety to performance in programmed instruction. *Journal of Educational Psychology*, 57, 14-17.
- Krutsinger, C. L. (1996). *A study of the relationship between self-esteem and achievement*. MA thesis, Truman State University, Kirksville, Missouri.
- Lado, R. (1961). *Language testing*. London: Lowe and Brydone.
- Lindvall, C. M. (1961). *Testing and evaluation: An introduction*. New York: Library of Congress.
- Malpass, J. R., O'Neil, H. F., & Hocesvar, D. (1999). *Self-regulation, goal orientation, self-efficacy, worry, and high-stakes math achievement for mathematically gifted high school students*. Retrieved 9 February, 2008 from <http://www.questia.com/googleScholar.qst;jsessionid>
- Nist, P. & Diehl, M. (1990). *PHCC test anxiety questionnaire*. Retrieved 11 February 2008 from <http://phcc.edu/questionnaire.html>.

- Pajares, F. (1996). Current directions in self-efficacy research. In M. Maehr & P. R. Pintrich (Eds.). *Advances in motivation and achievement*. Volume 10, (pp. 1-49).
- Pajares, F. (1997). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66 (4), 543-578.
- Pajares, F. & Miller, M. D. (1994). Role of self-efficacy and self-concept beliefs in mathematical problem solving: A path analysis. *Journal of Educational Psychology*, 86 (2), 193-203.
- Peleg, O. (2009). Test anxiety, academic achievement, and self-esteem among Arab adolescents with and without learning disabilities. *Learning Disability Quarterly*, 32 (1), 11-20.
- Phan, H. & Walker, R. (2000). *The predicting and mediational role of mathematics self-efficacy: A path analysis*. Retrieved 8 February, 2008 from: <http://www.aare.edu.au/00pap/pha00224.htm>
- Rich, J. (2004). *The relationship between deductive reasoning ability, test anxiety, and standardized test scores in a Latino sample*. Ph.D thesis, The Temple University Graduate Board.
- Richards, J. & Schmidt. R. (2002). *The Longman dictionary of language teaching and applied linguistics*. England: Pearson Education.
- Rubio, F. (2007). *Self-esteem and foreign language learning*. Newcastle: Cambridge Scholars Publishing.
- Sadighi, I. & Vasudeva, P. (2006). Relationship between quality of life, hardiness, self efficacy, and self-esteem among employed and unemployed married women in Zabol. *Iranian Journal of Psychiatry*, 1, 104-111.
- Sanchez, F. J. P. & Roda, M. D. S. (1998). Relationship between self-concept and academic achievement in primary students. *Electronic Journal of Research in Educational Psychology and Psychopedagogy*, 1 (1), 95-120.
- Shomoossi, N., Kooshan, M., & Ketabi, S. (2008). Language learning strategies and test anxiety. *Indian Journal of Applied Linguistics*, 34 (1-2), 115-125.
- Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68 (2), 202-248.

Tuchman, B. W. (1975). *Measuring educational outcomes, fundamental of testing*. New York: Library of Congress.

Walter, JR. W. W. (2003). *The reevaluation of the relationships among academic performance, academic achievement, social acceptance, and the self-esteem of third and sixth grade students*. Ph.D thesis, University of Alabama, Birmingham.

Yamini, M. & Tahriri, A. (2006). On the relationship between foreign language classroom anxiety and global self-Esteem among male and female students at different educational levels. *IJAL*, 9 (1), 101-129.

Yang, N. (1992). *Second language learners' beliefs about language learning and their use of learning strategies*. Doctoral dissertation, University of Texas, Austin.