JLSB
Journal of Life Science and Biomedicine

J. Life Sci. Biomed. 3(1): 27-34, 2013
2013, Scienceline Publication
ISSN 2251-9939

Original Article

Investigating the Relationship between Self-Efficacy, Cognitive and Metacognitive Strategies, and Academic Self-Handicapping with Academic Achievement in Male High School Students in the Tribes of Fars Province

Ali Javanmard[1*], Manizhe Hoshmandja[2] and Leila Ahmadzade[2]

[1].The Department General of Fars Province Education, Iran
[2].Department of Human Science, Behbahan Branch, Islamic Azad University, Behbahan, Iran

*Corresponding author's e-mail: javanmard.s@gmail.com

ABSTRACT

This study is aimed at Investigating the relationship between self-efficacy, cognitive and metacognitive strategies, and academic self-handicapping with academic achievement in male high school students in the tribes of Fars Province, Iran. A descriptive, correlational method has been used. The population of this study is male high school students in the tribes of Fars Province studying in the academic year of 2010-2011. A sample of 322 students was selected by means of cluster sampling. The instruments utilized in this study include the Self-efficacy Questionnaire developed by Schwarzer and Jerusalem, the Cognitive and Metacognitive Strategies Questionnaire developed by Vahedi, and the Self-handicapping Questionnaire developed by Jones, and Rhodewalt. The data gathered in this research were analyzed by means of descriptive statistics (mean, frequency, and standard deviation) and inferential statistics (Pearson correlation coefficient, regression, one-way ANOVA, Scheffe test, and the Kolmogorov-Smirnov test). The findings revealed that there is a significantly positive relationship between self-efficacy and academic achievement. Furthermore, there is a significantly positive association between cognitive and metacognitive strategies and academic achievement. In addition, there is a significantly negative relationship between academic self-handicapping and academic achievement. The results of the regression analysis showed that academic self-handicapping and academic self-efficacy are significant predictors of academic achievement, and cognitive and metacognitive strategies are not good predictors of academic achievement. Moreover, the results of this research demonstrated that different groups of students - students had different fields of study and were in different grades – were not significantly different with regard to academic self-efficacy, academic self-handicapping, and cognitive and metacognitive strategies. However, there were significant differences in employing metacognitive strategies with regard to students' grades and fields of study.

Keywords: Self-efficacy, cognitive strategies, Metacognitive strategies, Academic self-handicapping, Academic achievement, Nomadic students.

INTRODUCTION

Lack of motivation in students is one of the most important concerns of most teachers. Almost all research projects related to motivation, which include structures related to students' beliefs about their abilities to carry out their academic tasks, assert that these beliefs have been ignored in developing motivation patterns. One way to conceptualize students' beliefs about their abilities to carry out their school tasks is self-efficacy beliefs, which has been used by motivation researchers. Self-efficacy was indicated as an important motivation behavior by human behavior research in recent decades. It has been shown that higher levels of self-efficacy lead to better performance in some academic tasks [1]. Developing his social-cognition theory, Bandura introduced self-efficacy [2]. Bandura has defined self-efficacy as people's judgment about their ability to organize and carry out some behaviors in order to reach predetermined goals. In addition, Bandura held the view that self-efficacy is an important factor in regulating human behavior. An individual's self-efficacy judgments in a particular situation are more important than the quality and features of that situation in producing pressure. Individuals with low self-efficacy are pessimist about their abilities; hence they avoid situations deemed beyond their abilities. Conversely, people with high self-efficacy consider difficult tasks as challenges which they can overcome. These

To cite this paper: Javanmard A., Hoshmandja M and Ahmadzade L. 2013. Investigating the Relationship between Self-Efficacy, Cognitive and Metacognitive Strategies, and Academic Self-Handicapping with Academic Achievement in Male High School Students in the Tribes of Fars Province. *J. Life Sci. Biomed.* 3(1): 27-34.
Journal homepage: http://jlsb.science-line.com/

individuals choose challenging tasks, recover their self-efficacy faster, and keep on trying in spite of difficulties [3].

Cognitive strategies are methods that directly deal with learning and facilitate gathering, understanding and interpreting information. Cognitive processes reinforce thinking processes and facilitate reaching cognitive goals such as memorization [4]. Procoap has defined cognitive strategies as methods for processing verbal information [5]. Metacognition refers to a learner's awareness of the cognitive abilities and their application for learning, which is quite important for learners. By means of applying strategies, repetition allows learners to evaluate their progress and regulate their approach to learning [6]. Metacognitive strategies are methods used by learners to plan and monitor their learning activities and evaluate the results of these activities.

Academic self-handicapping has been a subject of psychological enquiry since 1960. Berglas et al. [7] pioneers in this regard, have defined academic self-handicapping as a behavior creating a good opportunity for people to ascribe failure to external factors and success to internal factors. These factors can be the result of activity (such as an illness before an exam) or laziness (failure to study for the exam). Self-handicapping includes a set of behaviors (or not conducting a set of behaviors) before an activity or during it, and not after it. Not trying hard, illness, shyness, seeking excuses, drug consumption, and frequent sleeping are examples of self-handicapping. Many of such instances, such as shyness and being fickle are weak forms of self-handicapping that are more unintentional because self-handicapping is a purposeful activity [8]. Koparan et al. [9] held that children and teenagers spend most of their time at school, hence the kind of instruction they receive at school, teacher-student relationship, student-student relationship, and the kind of instructional equipment students have influence their self-efficacy. Low self-efficacy and self-worth in students may lead to self-handicapping [10, 11]. Students who have low self-worth, seek ways to present a positive picture of themselves to others and show that they are not unable individuals. They are especially prone to motivational and behavioral difficulties and they may resort to self-handicapping strategies to save their worth in others' minds.

Valle et al. [12] found that self-efficacy beliefs, controlling learning, and test anxiety have direct causal effect on students' cognitive and metacognitive strategies on their way to gain academic achievement. Students enjoying high self-efficacy seek merit and ascendency. They make use of elaboration and organization strategies in a deep and elaborate manner and this may be the reason why they enjoy challenging issues and prefer difficult tasks [13]. Abedindi [14] demonstrated that students with higher self-efficacy use more cognitive and metacognitive strategies, have less test anxiety, and consequently have more academic achievements. Lavasani [15] revealed that self-efficacy is a good predictor of the amount of effort, cognitive and metacognitive strategies, homework value, and students' academic achievement. Deireh [16] found that self-efficacy has both direct and indirect influence on cognitive and metacognitive strategies through affecting goals, ascendency, and homework value. In general, research has shown that self-efficacy beliefs exert a great influence on students' motivation and their academic achievement. Kadivar [17] demonstrated that there is a significant association between self-efficacy beliefs and academic achievement. Aarabian [18] concluded that self-efficacy beliefs have a positive influence on university students' mental health and academic achievement.

Many research projects have shown the relationship between cognitive and metacognitive skills and academic achievement. Kummin et al. [19] there is significantly positive relationship between metacognitive skills and academic achievement. Parviz et al. [20] revealed that employing cognitive and metacognitive strategies contributes to academic success and that place of living (city or village) affects using these strategies. They concluded that urban students use these strategies more frequently than rural students. Ababaf [21] found that cognitive strategies related to simple and difficult tasks and metacognitive strategies are more frequently used by successful students than by weak students. Moreover, it has been shown that students of math, experiential sciences, and humanities are different with regard to using cognitive strategies, but they are similar in using metacognitive strategies.

Tomas et al. [22] found that self-handicapping is negatively correlated with deep learning, self-regulated learning, and test anxiety scores. Angeliki et al. [23] concluded that self-handicapping is positively related to performance-based goal setting and is negatively correlated with mathematics achievement. Research has shown that self-handicapping and performance affect each other, in other words, self-handicapping weakens performance and weak performance leads to self-handicapping [24]. It is evident that a student will have a weak performance if he or she intentionally delays studying until the night before an exam [24]. Shokrkon et al. [24] found that academic self-efficacy and self-handicapping are negatively related. Moreover, they demonstrated that there is a negative association between self-handicapping and academic achievement. Ababaf [21] found that there is a negative relationship between metacognitive strategies and academic self-handicapping. Moreover, there is a significant negative association between self-efficacy and academic self-handicapping. Furthermore, academic self-handicapping and upbringing methods are positively related. In addition, there is a significantly positive association between variables related to metacognitive strategies and the age when independence learning occurs are the best predictors of students' academic self-handicapping. Basaknejad [25] found that self-respect and self-handicapping are negatively correlated, and perfectionism and narcissism are positively correlated with self-handicapping. Moreover, there are multiple correlations between these three personality types. In male university students, perfectionism and in female university student's self-respect is the best predictors of self-handicapping.

To cite this paper: Javanmard A., Hoshmandja M and Ahmadzade L. 2013. Investigating the Relationship between Self-Efficacy, Cognitive and Metacognitive Strategies, and Academic Self-Handicapping with Academic Achievement in Male High School Students in the Tribes of Fars Province. *J. Life Sci. Biomed.* 3(1): 27-34.
Journal homepage: http://jlsb.science-line.com/

Place of living is related to more complicated issues. Place of living is related to students' social and cultural background and the educational and welfare facilities they are provided with. Economic conditions and educational and welfare facilities may explain the differences between rural, urban, and nomadic students. We should pay attention to the social and cultural milieu in psychoanalysis, which influence individuals' personality. Nomads are an important part of our society to whom we should pay attention in all aspects. Hence, conducting research projects on nomadic students is a necessity. Due to the paucity of research with regard to nomadic students, the present research aims at investigating the relationship between cognitive and metacognitive strategies and academic self-handicapping with academic achievement in male high school students of nomadic tribes of Fars Province, Iran. Six hypotheses are posed and studied as follows:

1. There is a significant relationship between self-efficacy and academic achievement.
2. There is a significant relationship between cognitive and metacognitive strategies and academic achievement.
3. There exists a significant relationship between academic self-handicapping and academic achievement.
4. First-grade high school students (studying general courses) and upper-grade high school students (studying math, experiential sciences, or humanities) are significantly difference with regard to self-efficacy.
5. First-grade high school students (studying general courses) and upper-grade high school students (studying math, experiential sciences, or humanities) are significantly difference with regard to using cognitive and metacognitive strategies.
6. First-grade high school students (studying general courses) and upper-grade high school students (studying math, experiential sciences, or humanities) are significantly difference with regard to academic self-handicapping.

MATERIALS AND METHODS

The method of this research is descriptive-correlation. The data gathered in this research were analyzed by means of descriptive statistics (mean, frequency, and standard deviation) and inferential statistics (Pearson correlation coefficient, regression, one-way ANOVA, Scheffe test, and the Kolmogorov-Smirnov test. The population of this study is male high school students in the tribes of Fars Province studying in the academic year of 2010-2011. Using Morgan Table, the researcher employed cluster sampling to pick up a sample of 322 participants. However, only 307 completed questionnaires were collected. In this project the following tools were applied for collecting information:

1. Self-efficacy Scale

This instrument has been developed by Schwarzer et al. [26]. This 20-item scale included two subscales, namely general self-efficacy and social self-efficacy. In 1981, this instrument was reduced to a 10-item questionnaire with one subscale. A score of 1 (totally unlike me) to 4 (totally like me) is assigned to each item. Hence, an individual's score ranges from 10 to 40 [27]. With regard to the reliability of this scale, Fooldachang [27] found a Cronbach's alpha of 0.83 and Rajabi [28] found a Cronbach's alpha of 0.82 and 0.84 for students of psychology at two different universities. Rajabi [28] convergent validities of 0.30 and 0.20 between general self-efficacy and Rosenberg self-esteem scales for two samples each consisting of 318 participants. This coefficient has been significant for $p< 0.001$. The reliability of this instrument, measured by Cronbach's alpha, in the present research was .68 showing that the reliability of the scale is desirable .

2. Cognitive and metacognitive strategies scale

This questionnaire has been developed by Vahedi based on the studies conducted by Flavel, Mayer, and Van Stein. This scale included five factors at first, but was changed to a six-factor questionnaire by Moosavian [21]. There are 30 items in this questionnaire. The participants were supposed to choose from a four-point Likert scale ranging from never (0) to always (4). In the present research, the Cronbach's alpha for the cognitive strategies scale was 0.73 and the Cronbach's alpha for the metacognitive strategies was 0.87 .

3. The academic self-handicapping scale

The self-handicapping questionnaire was developed by Rodvalt et al. [29]. It assesses people's tendency to use strategies such as lack of effort, simulation, laziness, emotional uneasiness, and being worried about progress. This scale consists of 25 items translated by Heidari et al. The participants are supposed to choose from a five-point Likert scale ranging from very little (1) to very much (5). Each item depicts a strategy which is used by students to justify their subsequent poor performance. To measure the validity of this questionnaire, Heidari et al. measured the correlation of this questionnaire with related constructs such as making excuses and making little effort, which ranged from 0.27 to 0.60. Uysal et al. [30] found the internal consistency of the self-handicapping questionnaire to be .80. They measured the internal consistency, which was 0.60 for making excuses and 0.72 for bad temper. In this research, the reliability of this instrument was measured by Cronbach's alpha, which was 0.74

Academic achievement: Students' GPA was considered as the indicator of their academic achievement.

RESULTS

First hypothesis: There is a significant relationship between self-efficacy and academic achievement.

Table 1 demonstrates that the correlation coefficient between self-efficacy and academic achievement is 0.64 (P< 0.01). In other words, the relationship between these two variables is significant and the first hypothesis is confirmed.

Table 1. The Pearson correlation coefficient between self-efficacy and academic achievement

Variables	Academic achievement	Self-efficacy
Self-efficacy	**0.64	1
Academic achievement	1	

**p<.01

Second hypothesis: There is a significant relationship between cognitive and metacognitive strategies and academic achievement.

According to Table 2, the correlation coefficient between cognitive strategies and academic achievement is 0.31 (P<0.01). In other words, indicating that the relationship between these two variables is significant. Moreover, there is a significantly positive relationship between metacognitive strategies and academic achievement (r=0.32), showing the association between these two variables is significant and positive. Furthermore, the correlation coefficient between cognitive strategies and metacognitive strategies is 0.40 (P<0.01), which means there is a significant relationship between cognitive and metacognitive strategies.

Table 2. The Pearson correlation coefficients among cognitive strategies, metacognitive strategies, and academic achievement

Variables	Cognitive Strategies	Metacognitive Strategies	Metacognitive Strategies
Cognitive Strategies	1		
Metacognitive Strategies	**0.40	1	
Academic Achievement	**0.31	**0.32	1

**P < 0.01

Hypothesis 3: There exists a significant relationship between academic self-handicapping and academic achievement.

Based on Table 3, there is a significantly negative relationship between academic self-handicapping and academic achievement (r= -0.53), showing the association between these two variables is significant and negative. Hence, the third hypothesis is confirmed. As Table 4 demonstrates, academic self-efficacy and academic self-handicapping significantly predict academic achievement (R=0.74). These two variables account for 54% of variance in academic achievement. Moreover, Table 5 depicts that for academic self-efficacy β=0.53, and for academic self-handicapping β=-0.38. Finally, Table 5 demonstrates that cognitive and metacognitive strategies are not good predictors of academic achievement.

Table 3. The Pearson correlation coefficient between academic self-handicapping and academic achievement

Variables	Academic achievement	Academic self-handicapping
Academic self-handicapping	**-0 .53	1
Academic achievement	1	

**P < 0.01

Table 4. The results of regression analysis for predictive variables

Variable	Mount of Constant	B	T	Sig.	R	R^2
Cognitive	-	0.04	0.08	0.93	-	-
Metacognitive	0.59	0.03	0.60	0.55	0.74	0.54
Self-efficacy	-	0.53	13.1	0.01	-	-
Self-handicapping	-	-0.38	-9.3	0.01	-	-

Hypothesis 4: First-grade high school students (studying general courses) and upper-grade high school students (studying math, experiential sciences, or humanities) are significantly difference with regard to self-efficacy.

As Table 5 illustrates, there is no significant difference between students with different academic background with regard to academic self-efficacy (p<0.41). Therefore, the null form of the fourth hypothesis is confirmed. In other words, students studying different fields of study are similar with regard to academic self-efficacy. Too, there is no significant difference between students in different grades with regard to academic self-

To cite this paper: Javanmard A., Hoshmandja M and Ahmadzade L. 2013. Investigating the Relationship between Self-Efficacy, Cognitive and Metacognitive Strategies, and Academic Self-Handicapping with Academic Achievement in Male High School Students in the Tribes of Fars Province. *J. Life Sci. Biomed.* 3(1): 27-34.
Journal homepage: http://jlsb.science-line.com/

efficacy (p<0.82). Therefore, the null hypothesis is confirmed. In other words, students studying in different grades are similar with regard to academic self-efficacy.

Table 5. Results of one-way ANOVA for academic self-efficacy with regard to students' fields of study and grade

Source of changes	Sum of squares	Df	Meanof squares	F	Sig.
Between groups	15.9	3	5.3	0.96	0.41
Within groups	1666	303	5.5		
Total	1681.9	306			
Between groups	5.2	3	1.7	0.31	0.82
Within groups	1676.7	303	5.5		
Total	1681.9	306			

Hypothesis 5: First-grade high school students (studying general courses) and upper-grade high school students (studying math, experiential sciences, or humanities) are significantly difference with regard to using cognitive and metacognitive strategies.

Based on Table6, there is no significant difference between students having different fields of study with regard to cognitive strategies (p<0.07). Therefore, the null hypothesis is confirmed. In other words, students having different fields of study are similar with regard to using cognitive strategies. Too there is no significant difference between students in different grades with regard to cognitive strategies (p<0.18). Therefore, the null hypothesis is confirmed. In other words, students studying in different grades are similar with regard to using cognitive strategies.

According to Table 7, students having different fields of study are significantly different with regard to metacognitive strategies (p<0.01). Therefore, the researcher's hypothesis is confirmed. In other words, students having different fields of study have different levels of metacognitive strategies. In order to investigate the differences, Scheffe post hoc test was run. It was found that a significant difference exists between general students (grade 1) and math students and between general students and experiential students. Too students studying in different grades are significantly different with regard to metacognitive strategies (p<0.01). Therefore, the researcher's hypothesis is confirmed. In other words, students studying in different grades have different levels of metacognitive strategies. In order to investigate the differences, Scheffe post hoc test was run. It was found that a significant difference exists between general students (grade 1) and grade 2 students (p<0.01).

Table 6. Results of One-way ANOVA for cognitive strategies with regard to students' fields of study and grade

Source of changes	Sumof squares	df	Meanof squares	F	Sig.
Between groups	332.7	3	110.9	2.4	0.07
Within groups	14115.2	303	46.6		
Total	14447.9	306			
Between groups	232.5	3	77.5	1.6	0.18
Within groups	14215.4	303	46.9		
Total	14447.9	306			

Table 7. Results of one-way ANOVA for metacognitive strategies with regard to students' fields of study and grade

Source of changes	Sum of squares	Df	Mean of squares	F	Sig.
Between groups	528.4	3	176.1	6.3	0.01
Within groups	8481.6	303	28		
Total	9010	306			
Between groups	494.7	3	164.9	5.8	0.01
Within groups	8515.4	303	28.1		
Total	9010.1	306			

Hypothesis 6: First-grade high school students (studying general courses) and upper-grade high school students (studying math, experiential sciences, or humanities) are significantly difference with regard to academic self-handicapping.

As Table 8 illustrates, there is no significant difference between students having different fields of study with regard to self-handicapping (p<0.37). Therefore, the null hypothesis is confirmed. In other words, students having different fields of study are similar with regard to self-handicapping. Too there is no significant difference between students studying in different grades with regard to self-handicapping (p<0.59). Therefore, the null hypothesis is confirmed. In other words, students studying in different grades are similar with regard to self-handicapping.

To cite this paper: Javanmard A., Hoshmandja M and Ahmadzade L. 2013. Investigating the Relationship between Self-Efficacy, Cognitive and Metacognitive Strategies, and Academic Self-Handicapping with Academic Achievement in Male High School Students in the Tribes of Fars Province. *J. Life Sci. Biomed.* 3(1): 27-34.
Journal homepage: http://jlsb.science-line.com/

Table 8. Results of one-way ANOVA for self-handicapping with regard to students' fields of study and grade

Source of changes	Sum of squares	df	Mean of squares	F	Sig.
Between groups	644	3	214.6	1.04	0.37
Within groups	62334	303	205.7		
Total	62978	306			
Between groups	399	3	132.9	0.64	0.59
Within groups	62579	303	206.5		
Total	62978	306			

DISCUSSION

Since examining high school students' academic achievement is of prime importance, the present study explored the contribution of self-efficacy, self-handicapping, cognitive strategies, and metacognitive strategies to nomadic students' academic achievement in Fars Province, Iran. As the results of this study revealed, there is a significantly positive relationship between academic success and self-efficacy. In other words, students' academic achievement increases as their self-efficacy beliefs increase. This supports the findings of Valle et al. [12], and Abedini et al. [13]. In a similar vein, Kadivar [17] found that there is a significant difference between self-efficacy beliefs and academic success. Similarly, Aarabian et al. [18] concluded that strong self-efficacy has a positive influence on university students' mental health.

Another important finding revealed by this study is that there is a significant relationship between cognitive and metacognitive strategies and academic achievement. To put it differently, the more cognitive and metacognitive strategies students use, the more their academic success is. This finding is in line with those of Morton [31], Alonso et al. [32]. In addition, it has been revealed that metacognition plays a positive role in reading comprehension [33]. Similarly, Kummin et al. [19] reported that there is a significantly positive relationship between metacognitive skills and academic achievement. Moreover, Parviz et al. [20] demonstrated that using cognitive and metacognitive strategies exert a positive influence on academic success. Most of the research projects conducted to investigate the effect of cognitive and metacognitive strategies on learning have found that learners who use strategies appropriate to their learning tasks are more successful in their learning .

This study also demonstrated that there is a significantly negative association between academic achievement and academic self-handicapping. In other words, the more self-handicapping strategies students employ the less academic success they achieve. This supports the findings of, Midgoli et al. [10] and Shokrkon [24]. Zackerman asserted that self-handicapping and academic performance affect each other. In other words, weak performance leads to further self-handicapping and vice versa [24]. Shokrkon et al. [24] found that there exists a significantly negative relationship between self-handicapping and previous and subsequent academic performance. In a similar vein, Angeliki et al. [23] concluded that self-handicapping is positively related to performance-based goal setting and is negatively correlated with mathematics achievement .

Furthermore, the results of this study showed that academic self-efficacy and self-handicapping are significant predictors of academic achievement, and cognitive and netacognitive strategies are not good predictors of academic success.

In addition, the findings of this study revealed that students studying in different grades are not significantly different with regard to academic self-efficacy, self-handicapping, and cognitive strategies. In other words, students of different grades are rather similar with regard to academic self-efficacy, self-handicapping, and cognitive strategies. Moreover, it was found that students having different fields of study are not significantly different with regard to academic self-efficacy, self-handicapping, and cognitive strategies. To put it differently, students of different fields of study have more or less the same level of academic self-efficacy, self-handicapping, and cognitive strategies.

Another salient finding of this study is that students having different fields of study are significantly different with regard to metacognitive strategies ($p<0.01$). In other words, students having different fields of study have different levels of metacognitive strategies. In order to investigate the differences, Scheffe posthoc test was run. It was found that a significant difference exists between general students (grade 1) and math students and between general students and experiential students. Furthermore, students studying in different grades are significantly different with regard to metacognitive strategies ($p<0.01$). In other words, students studying in different grades have different levels of metacognitive strategies. In order to investigate the differences, Scheffe post hoc test was run. It was found that a significant difference exists between general students (grade 1) and grade 2 students ($p<0.01$). This finding is in contrast with Ababaf [21] who found that students of math, experiential sciences, and humanities are different with regard to using cognitive strategies, but they are similar in using metacognitive strategies. The researcher holds the view that this contrast may be rooted in the differences between the population of the studies.

Consequently, the educational policy makers, particularly those in charge of the education of the tribes. should make educational plans appropriate to teenagers' cognitive and mental features. This may play an

important factor in making instructional materials attractive to students, resulting in more academic achievements. Self-efficacy and academic achievement go hand in hand. This can lead students to greater progress because their motivation to pay attention to their teachers and try harder increases, do their homework with more interest, and being successful in society and their parents' satisfaction become more important to them. In order to go faster in this direction, educational policy makers, mangers, instructors, and councilors and parents should attach importance to teaching cognitive and metacognitive strategies. The quality of self-efficacy changes in different developmental stages, hence educational managers should be familiar with the foundations of developmental psychology with regard to self-efficacy and cognitive and metacognitive strategies and the interplay between them and academic achievement. Another important factor involved in academic success is students' use of academic self-handicapping strategies. Based on their motivation, individuals fall into two groups, namely those who have avoiding motivation (avoiding failure) and those who have seeking motivation (seeking success). Most research projects have focused on seeking motivation because researcher, teachers, and parents are inclined to encouraging students to get more involved in school tasks, take academic risks, and make more efforts to carry out their school duties. However, we should not overlook the importance of avoiding motivation. Self-handicapping is a kind of avoiding behavior decreasing individuals' efforts and destroying their academic performance. The primary goals of all avoiding behaviors are laziness and passiveness, hampering students' learning. The findings of this research highlight the importance of students' personality types in addition to their cognitive abilities. It is recommended that parents, educational councilors, and other officials involved in the education of nomadic students to be familiarized with the importance of self-efficacy and other personality variables investigated in this study. It is also suggested that the same issue to be examined in primary and junior students. Finally, future research may focus on psychological, family, emotional, cultural, and institutional factors involved in the education of nomadic students who are deprived but talented.

REFERENCES

1. Bandura, A. 1997. Self-efficacy: The exercise of control. New York: Freeman.
2. Basol, G. 2010. Validity and reliability of Turkish form of children's self-efficacy scale in: Catterall, J.S. 1998. Risk and resilience in student transitions to high school. American Journal of Education.106: 302–333.
3. Karademas, E. & Kalantzi, A. 2004. The stress process, self-efficacy expectations, and psychological health. Personality and Individual Differences, 37: 1033-1043.
4. Schleifer, L.L.F. & Dull, R.B. 2009. Metacognition and Performance in the Accounting Classroom. Issues in Accounting Education, 24, (3): 339-367.
5. Shokrpour, N. & Fotovatian, S. 2009. The effects of consciousness rising on metacognitive strategies on EFL students` reading comprehension. ITL International Journal of Applied Linguistics.
6. Ally, M. 2008. Foundations Educational Theory for Online Learning INI. Anderson and G. Sanders (EDS); Theory and Practice of Online Learning, Athabasca; Canada: Athabasca University, pp. 1-31.
7. Berglas, S., & Jones, E.E. 1978. Drug choice as a self-handicapping strategy in response to no contingent success. Journal of Personality and Social Psychology, 36: 405-41.
8. Tim, U. & Carol, M. 2001. Academic Self-Handicapping: What We Know, What More There is to Learn. Educational Psychology Review, 13(2).
9. Koparan, S. Ozturk, F., Ozkilic. R. & Senisik, Y. 2009. Anivestijation of social self-efficacy expectations and assertiveness in multi – program high school students. Procedia social and behavioral Sciences 1: 623-629.
10. Midgley, C., Maeher, M.L., Hruda, L.Z., Anderman, L., Freeman, K.E, Gheen, M. et al. 2000. Manual for the patterns of adaptive learning scales (pals) ann.arbor, mi: University of Michigan.
11. Prapavessis, H. & Grove, J.R. 1998. Self-handicapping and self-esteem. Journal of applied sport Psychology, 10: 175-184.
12. Valle, A., Nunez P.J.C., Gonzalez C.R., Gonzalez-Pienda G.J.A., Rodriguez, S., Rosario, P., Munoz Casavid, M.A., & Cerezo, R. 2009. Academic goals and learning quality in higher education students. Spanish Journal of Psychology, 12(1): 96-105.
13. Greene, B.A, Miller, R.B, Crowson, H.M, Duke, B.L & Akey, K.L. 2004. Predicting high school Student, cognitive engagement and achievement: contribution of classroom perception and motivation. Contemporary Educational Psychology, 29: 462-482.
14. Abedini, Y., Bagherian, R., & Kadkhodaei, M. 2010. Investigating the relationship among motivational beliefs, cognitive and metacognitive strategies, and academic achievement: Testing alternative models. New Trends in Cognitive Psychology, 12(3): 34-48.
15. Lavasani, M., Ezhehei, J., & afshari, M. 2009. The relationship among academic self-efficacy, academic involvement, and academic achievement. Journal of Psychology, 13(3).
16. Deireh, E., & Banijamali, S. 2009. Investigating the contribution of motivational factors in using cognitive and metacognitive strategies in the process of learning. Psychological Studies, 5(3).
17. Kadivar, p. 2003. The role of self-efficacy beliefs and intelligence in high school students' academic achievement. Journal of Education and Psychology, 1: 45-58.
18. Aarabian, A., Khodapanahi, M., Heidari, M., & Saleh Sadooghpoor, B. 2004. Investigating the association among university students 'self-efficacy beliefs, mental health, and academic success. The Journal of Psychology, 8(2): 361-371.
19. Kummin, S. & Rahman, S. 2010. The relationship between the use of meta-cognitive strategies and achievement in English. Procedia Social and Behavioral Sciences, 7(C): 145-150.
20. Parviz, K., & Sharifi, M. 2011. The relationship between cognitive and metacognitive strategies and academic achievement in urban and rural high school students. Educational Strategies Quarterly, 4(1).

To cite this paper: Javanmard A., Hoshmandja M and Ahmadzade L. 2013. Investigating the Relationship between Self-Efficacy, Cognitive and Metacognitive Strategies, and Academic Self-Handicapping with Academic Achievement in Male High School Students in the Tribes of Fars Province. *J. Life Sci. Biomed.* 3(1): 27-34.

Journal homepage: http://jlsb.science-line.com/

21. Ababaf, H. 2008. The relationship between metacognitive strategies, self-efficacy, and upbringing methods and academic self-handicapping in high school students in Ahvaz. New findings in Psychology, 7(2): 108-122.
22. Thomas, C.R. & Gadbois, S.A. 2007. Academic Self-handicapping: The role of slef-concept clarity & student learning strategies, Bry Rduc psychol, 77(1):101-19.
23. Angeliki, L. & Eleftheria, G. 2007. Predicting academic self-handicapping in different age groups. British journal of educational psychology, 77, 3: 595-611.
24. Shokrkon, H., Hashemi, S., & Najarian, B. 2005. Investigating some important factors leading to academic self-handicapping and some selected consequences in male high school students in Ahvaz. Shahid Chamran Journal of Educational Psychology, 12(3): 77-100.
25. Basaknejad, S. 2009. The relationship among self-respect, perfectionism, narcissism, and self-handicapping in a group of students at Shahid Chamran University, Ahvaz, Iran. The Spring Journal of Psychology, 13(1): 69-84.
26. Schwarzer, R., & Jerusalem, M. 1995. Generalized Self-Efficacy Scale in J. Weiman, S. Wright, & M. Johnston (Ed). Measures in health psychology: A user's portfolio, causal and control beliefs. 35-37, Winderser, UKNFER-NELSON.
27. Fooldachang, M. 2008. Investigating self-efficacy beliefs in female students of fars Province and presenting appropriate suggestions. The anthology of the Research Weak of the Organization of Education in Fars Province, 82: 75-99.
28. Rajabi, G., 2006. Investigating the reliability and validity of general self-efficacy in students of the Faculty of Education at Shahid Chamran University and Azad University: Marvadasht Branch. New Thoughts in Education (Faculty of Education and Psychology of Azahra University), 2(1): 111-122.
29. Jones, E.E., & Rhodewalt, F. 1982. The Self-Handicapping Scale. Princeton University.
30. Uysal, A., & Lu, Q. 2010. Self-handicapping and pain catastrophizing. Personality and Individual Differences, 49(5): 502-505.
31. Morton, A. 2008. Helping Students Set Goals and Monitor their own Learning. Wiki book, the open- content textbooks collection: Amor 007 Talk 23:21(UTC).
32. Alnso, S.S. & Vovides, Y. 2007. Integration of metacognitive skills in the design of learning objects. Computers in human behavior, 23(6): 2585-2595.
33. Coutinho, S.A. 2007. The relationship between goal, metacognition, and academic success. Northern Illinois University, USA: Educate, 7(1): 39-47.