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THE SIMPLE AND MULTIPE RELATIONSHIP OF SELF- REGULATION STRATEGIES AND ACADEMIC SELF EFFICACY WITH STUDENT ACADEMIC PERFORMANCE IN SHAHID CHAMRAN UNIVERSITY

HAKIM SAHAGHI*[1], AMIN KORAEI[2], PARVANEH MOHSENI SANGACHIN[3], PARASTOU MOHSENI SANGACHIN[4], ARASH JELODARI[5]

1. M.A. in Educational Psychology, Shahid Chamran University of Ahvaz
2. Ph.D. in counseling, Azad Islamic University of Ahvaz
3. M.A. in educational planning, Education and Training of Anzali City
4. M.A. in psychology, Education and Training of Tehran City
5. B.A. student in counseling psychology, Shahid Chamran University of Ahvaz; E-mail: Arash.jelodari@gmx.us

***Corresponding author. E Mail address: sahaghihakim@gmail.com**

ABSTRACT

The purpose of the current study was to investigate the role of self-regulation strategies and academic self-efficacy in students' performance of Shahid Chamran University of Ahvaz. Variables self-regulation strategies and academic self-efficacy are considered as predictive and academic performance is considered as criterion variables. The sample included of 175 students who were studying in Shahid Chamran University in 2014-15 academic year. The sample was selected using random sampling method. The obtained results showed that self-regulation strategies and academic self-efficacy have significant, positive relationship with academic performance in the entire sample. In addition, regression method was used to determine the contribution of each variables in prediction of the criterion variable. The results of the regression analysis showed that a major contribution of Academic Performance is explained by self-regulation strategies and academic self-efficacy, respectively.

Keywords: Self-regulation strategies, self-efficacy, Academic Performance

INTRODUCTION

Academic performance in school is one of the factors which is closely related to individuals' succeed. Many researchers, social sciences, and psychology professionals have been interested in academic performance during different periods of the last decades, and it has been increasingly becoming an important issue in last few years. In this context, every year lots of money is spent by households and governments to improve students' performance (Yusefi, Mirjafari, & Rezai, 2008). It is important to attend to the issue as the growth and maturation of a modern society owe to its educational system, and attention to students' academic performance and upgrading it may lead to their student academic achievement. Today, for learners, GPA is a sort of representation of their scientific ability to enter to labor market and higher education levels. More they try and improve their performance in school, more flourish their talents will be and more success they achieve in school. They become informed people who fulfill their academic goals through achieving gains and through their satisfying performance in educational setting. Then, more we try to recognize the factors related to learner's performance in school, less the problems individuals will be faced with, thus more successful people will enter into the society; therefore, this would be helpful in order to develop a successful and healthy community. Then, the society, in particular the educational institutions, have to pay more attention to academic destiny and successfully growth and maturation of people in society

According to Hoyle [13] Self-regulation is the processes by which people control their thoughts, feelings, and behaviors, and people who succeed at self-regulation, They effectively manage their perceptions of themselves and their social surroundings, their behaviors are consistent with their goals and standards of behavior, conversely, people who struggle or fail at Self-regulation, they lose control of their personal and social experience, their behavior does not contribute to the fulfillment of important goals or correspond to standards of behavior to which they subscribe. Self-regulation is not a trait that some students have and others do not. Rather, it involves the selective use of specific processes that must be personally adapted to each learning task. It’s about setting goals, selecting strategies to attain those goals, monitoring progress, restructuring if the goals are not being met, using time efficiently, self-evaluating the methods selected, and adapting future methods based on what was learned this time through [26]. Many researchers agree that an essential aspect of self-regulated learning is its goal directedness. Other personal attributes that emphasize self-regulated learning have been identified, including a sense of self-efficacy, willingness to practice, commitment, time management, metacognition awareness, and efficacy strategy use. In contrast, personal attributes that have been associated with poor self-regulated learning and underachievement are impulsiveness, low academic goals, low self-efficacy, low control, and avoidance behavior [6].

One of the characteristics of students that self-regulate their learning is the control of their motivation and emotions. Numerous studies indicated that motivational beliefs predict self-regulated learning [4, 12, 15]. Within the multiplicity of motivational beliefs, self-efficacy was specially targeted for examination in relation to self-regulated learning. Especially research highlights the role of perceptions of \self-efficacy and goals on self-regulated learning [17]. Weimer [26] said; “There is a relationship between self-regulation and perceived efficacy and intrinsic interest. Learners have to believe that they can learn, whatever the task before them, and they need to be motivated”. Self-efficacy is conceptualized as the perceived capability to execute a task or to succeed in a specific topic [2]. Considerable evidence documented the relationship between expectancy for success (typically assessed as self-efficacy) and the adaptive use of cognitive and metacognitive strategies. Students who have more confidence in their abilities to learn are better at monitoring their work time and modifying their learning strategy when necessary [18], higher self-efficacy is related to an increased use of deep-processing strategies over time [3] and self-efficacy beliefs are positively predictive of the quantity of effort students will exert on a task [25]. In this way Borkowski et al [5] assume reciprocal effects of motivational beliefs and cognitive and metacognitive strategy use so that, self-efficacy beliefs lead to the efficient use of cognitive learning strategies and the increased use of metacognitive strategies. According to this information, self-efficacy relates to self-regulated learning but, there are more motivational beliefs in literature such as intrinsic goal orientation, extrinsic goal orientation, task value, control of learning beliefs, and test anxiety [22], it is not clear the extent those beliefs relate to self-regulated learning.

Self-efficacy is a motivational factor which plays a critical role in academic involvement and academic achievements of students [14]. Academic self-efficacy is a construct referring to the role of individuals' self-effectiveness beliefs in their abilities, and that more they believe in their abilities, the better their abilities in learning activities is [7]. Students with same knowledge, skills, and strategies show notable differences in occupation, academic performance, and progression in academic tasks. A key motivation for these differences is self-efficacy beliefs. By obtaining some useful information, individuals develop opinions about their abilities for learning. Over time, these opinions become solidified and lead children to perceive themselves as able or less able individuals [19]. Self-efficacy beliefs positively impact on students' use of self-regulate learning strategies, select and occupy career, resistance in difficult situations of task, academic motivation, and academic achievement [23]. Beliefs, abilities and learning, previous experiences, attitudes, attributions, education style, and social background can affect on students' perceived self-efficacy [24]. Self-efficacy beliefs impact on behavioral (strength, effort, adaptive help seeking), cognitive (use of strategy), metacognitive (awareness of one own cognitions), and motivational engagement in academic tasks [14]. When an engagement is done, learning and success that increase self-efficacy and, in turn, engagement, is followed. The results of previous researches show that individuals' beliefs affect on their learning abilities in their approach to new challenges. The students with high self-efficacy specify challenging goals for themselves and become firmly committed to those goals [2]. Perceived self-efficacy has effect on goal set behavior, effort and strength [30], stimulate the use of learning strategies [29], determines the possibility of taking advantage of master opportunities, and impacts on selecting the learning environments [27]. Self-efficacy beliefs adjust learning behavior and affect on future expectations and academic achievement [28]. In the literature review of the research, showed that there is a significant, positive relationship between self-regulation and academic performance; also, there was a significant, positive relationship between inner locus of control and self-regulation; the research of Safarian Tusi also indicates that there is a significant relationship between self-regulate learning and academic performance. Taheri Khorasani concluded that there is a significant, positive relationship between self-regulated learning and academic performance. Pintrich and DeGroot [21] showed that self-regulation and self-efficacy are best predictors of academic performance. In sum, according to the conducted researches, can conclude that self-regulation and achievement motivation have an important role in students' academic performance; thus, the contribution of personality, motivation, emotional, and affective factors in learners' academic performance in undeniable

Hypotheses

In this study, we sought to examine the following hypotheses:

1. There is a significant relationship between self-regulation strategies and Academic Performance.

2. There is a significant relationship between between self-efficacy and Academic Performance.

3. There is a significant multiple relationship between self-regulation strategies and self-efficacy with Academic Performance.

MATERIALS AND METHOD

Regarding to the nature of the issue and the aim of the study, descriptive-correlation methods were used. The statistical population of the research includes all of the students of shahid chamran University of Ahvaz in academic year of 2014-15. In the current research, 175 students were selected as the sample using simple random sampling method. The research ethics were completely followed as to the participants were assured about secretary of the information and they completed the questionnaires willingly in a silent environment and anonymously.

In this research, following questionnaires were used to collecting information:

Self-Regulation Learning Questionnaire

SRQ scale had been made by Bouffard et al in 1995 with using of different scales [21, 1]. This questionnaire has 19 test and 3 categories. 7 items are about meta-cognitive dimensions, 9 items are about cognitive dimensions, 3 items are about motivation dimensions. Each items have 5 options (doesn't correspond with me, very low correspond, sometimes correspond, relatively correspond, correspond with me correctly). Questions analyze with using the method of principal component factors, that results show 13 test are appropriate, 6 tests in meta-cognitive dimension, 4 tests in cognitive dimension and 3 tests in motivation dimension. Kronbach's alpha is used to determine the validity of questionnaire that resulting coefficient's for meta- cognitive, cognitive and motivation dimensions are 0.71, 0.55, and 0.50. Bouffard and et [8] reported thesecoefficients 0.72, 0.78, 0.68. Since the reduction of questions and their movement affects the alpha coefficient, such a different was expected. So these results are average in validity of cognition and motivation dimension. Total coefficient validity of this questionnaire obtain accordingly Kronbach's Alpha is equal to 0.70.

Patrick's Academic Self-Efficacy

This scale is designed by Patrick, Hix, & Ryan [11]; it included 5 items reflecting students' perceptions about their competency in performing class tasks. This scale is a self-report scale which its items are of likert type (1 = fully disagree, 2 = disagree, 3 = no opinion, 4 = agree, 5=

fully agree) and has made based on existing different tools. Migley et.al. [16] reported .78 for the reliability of this scale using Cronbach's alpha. Hashemi Sheykh Shobani [11], using Cronbach's alpha and Spearman-Brown split-half methods, reported 0.65 and 0.59, respectively, for reliability. Validity of this construct has been proven in many studies. In another study by Haji Yakhchali [10], Cronbach's alpha and split-half method were used to examine the reliability of this scale. Cronbach's alpha coefficient and split-half for academic self-efficacy scale obtained 0.73 and .66, respectively, that indicates desirable and acceptable reliability of this test. Also, confirmatory factorial analysis was used to examine the validity of this subscale and the obtained results showed that all of items of academic self-efficacy scale have acceptable factorial loads bigger than .30 and have positive and significant load on their related factor in level of $p < .0001$. Furthermore, Cronbach's alpha for this research was 73%.

RESULTS

The descriptive and inferential statistical methods were used to analyze the obtained data. Mean, standard deviation, the largest and smallest scores were used in level of descriptive statistics, and correlation coefficient and regression analysis in simultaneously entry way have been used in level of inferential statistics.

Table (1) shows the descriptive indices related to the participants' achieved scores in research variable:

Correlation coefficients between self-regulation strategies and self-efficacy with Academic Performance are presented table 2.

Table 2 shows the relationship of self-regulation strategies, self-efficacy and Academic Performance in students. As it is shown in table 2, there is a positive, significant correlation between self-regulation strategies and Academic Performance ($p = 0.000$, $R = 0.097$). Also, there is a positive, significant correlation between self-efficacy and Academic Performance ($p = 0.001$, $R = 0.192$). Regression method was used to examine the linear combination of self-regulation strategies and self-efficacy with Academic Performance. In doing so, two predicting variables (self-regulation strategies and self-efficacy) entered into stepwise multiple regression equation one by one and values of R^2, R and F are calculated. Table 3 shows the linear combination of self-regulation strategies and self-efficacy with Academic Performance.

Table 1: Mean, standard deviation, smallest and largest scores achieved by participants in research

Index / Variable	Mean	Std. Dv.	Largest score	Smallest score
self-regulation strategies	6.65	1.61	10	2
self-efficacy	8.09	1.57	10	3

Academic Performance	15.85	1.73	20	4

Table 2: Relationship between self-regulation strategies, self-efficacy and Academic Performance

research variables	1	2	3
self-regulation strategies	1		
self-efficacy	0.097	1	
Academic Performance	0.097	0.192	1

N=175

Table 3: Predicting stepwise multivariate regression of Academic Performance

Variables	R	B	Std.Error	Beta	T P	F P
self-regulation strategies	0.097	0.086	1.73	0.080	T=27.16 P=0.000	F=1.65 P=0.000
self-efficacy	0.208	0.202	1.70	0.184	T=16.53 P=0.000	F=3.87 P=0.000

DISCUSSION

The analysis of the first hypothesis that there is a relationship between self-regulation and students' academic performance showed that there was a direct relationship between these components. In explaining this finding can mention that students who use more self-regulation strategies try to learn materials and improve their performance through making sense of information, developing logical associations with prior information, managing the situation, and creating appropriate learning environment during teacher teaching. The results of the current research are in line with those of Pintrich and DeGroot [21]. The second hypothesis showed that there was a direct relationship between self-efficacy and students' academic performance. In explaining this finding can say that students who consider themselves self-efficacious individuals use more meta-cognitive strategies and exhibit more insist in doing tasks which this, in turn, improves academic performance. These results are consistent with those of Paris and Oka [20]. Also, in explanation of the third hypothesis can say that both variables self-regulation strategies and self-efficacy have an important role in explaining academic performance. According to the results, it is worth noting to suggest instructors, teachers, and coaches to give students more opportunity to learn through creating appropriate circumstances for growth of self-efficacy and teaching self-regulation learning strategies. Also, by presentation of materials as if they become a part of students' cognition structures, along with teaching metacognitive strategies to this kind of students, provide more proper environment. Among the limitations of the present study was that the study was conducted on male high school students. Therefore, generalization to female students or lower levels is not possible. In this study, questionnaires were exclusively used. Because of this reason, there may be a bias in obtained information. The findings of this study cannot be generalized to other cities and cultures.

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