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The Relationship Between Metacognition Beliefs and Mental Health with Self-Efficacy of Sixth Primary School Students in Shiraz

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Abstract

Purpose of this study was to investigate the relationship between meta-cognitive beliefs and mental health with self-efficacy in elementary school students in Shiraz. The population consisted of all sixth grade elementary school students in the 3rd and 4th districts, selected by multi-stage cluster sampling method of 357 subjects. The measurement tools of this research included general health questionnaire, academic self-efficacy questionnaire and metacognitive beliefs questionnaire, which validity and reliability were estimated using Cronbach's alpha test. Descriptive statistics (mean...) and inferential statistics (Pearson correlation and multiple regression tests) were used to analyze the data. The results showed that the physical sign component was able to predict the academic self-efficacy variable and the rest of the mental health components were not able to predict academic self-efficacy. The component of positive beliefs about worries was able to predict the variable of academic self-efficacy and the rest of the meta-cognitive beliefs components were not able to predict academic self-efficacy.

Keywords

General Health, Academic Self-Efficacy, Meta-Cognitive Beliefs, Students

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1. Introduction

Identifying the psychological factors affecting the academic achievement of learners in different educational levels is always the focus of attention of psychologists in education. In recent years, several psychological factors have been identified in educational settings. Among these factors, self-efficacy has been conceptualized. Self-efficacy is one of the key variables in Bandura's cognitive social theory. Theoretical foundations of self-efficacy have been tested in a variety of disciplines and environments and have more and more theoretical and empirical support. The lack of motivation in students is one of the main concerns of most teachers. Almost all motivation research that incorporates structures related to students' beliefs about their ability to do academic assignments believes that these beliefs are often ignored in the design of motivational patterns. Self-efficacy beliefs are one way in which motivational researchers conceptualize the ability of students to believe. In past decades, self-efficacy has emerged as an important motivational behavior in the study of human behavior. It has been found that high levels of self-efficacy lead to increased levels of performance in a number of assignments [1]. Self-efficacy beliefs affect people's thinking, how to deal with problems, emotional health, decisions about coping with stress and depression, selecting goals and accessing them. Self-efficacy beliefs, on the other hand, contribute to the improvement of behavior and health and life satisfaction, and on the other hand, many of the problems of people are due to these beliefs. Believing with a feeling of being unable to change the conditions that significantly affect one's life, It makes sense of emptiness, frivolity, sadness and vulnerability to stressful events. When people find themselves

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unable to attain valuable consequences, they are depressed. Individual judgments in the performance of themselves, when unable to influence events and dissatisfaction with peripheral events, are at the core of the feelings of the impotence of depressed people. Individuals with poor self-esteem see homework and tasks more difficult and this causes them to be stressed; rather, strong self-efficacy beliefs make it difficult to get comfortable and close to homework [16].

According to the present article, the present study is aimed to study the relationship between metacognitive beliefs and mental health with self-efficacy of sixth elementary school students in Shiraz.

2. Method

This research is descriptive and correlational. This study was designed and evaluated to determine the relationship between metacognitive beliefs and mental health with self-efficacy of sixth grade elementary school students in Shiraz.

Statistical population: The statistical population of this study includes all sixth and sixth grade elementary school students (district 3 and 4 (5000 people) in Shiraz, who studied in 2017-2018.

Sample: The sampling was multistage cluster sampling, from which four educational areas of Shiraz district 3 and 4 were chosen. Then, among the elementary schools of that area, 14 schools were selected and from among the sixth grade students of these schools, 357 students (195 boys and 162 girls) were selected and made available to the test.

Table 1. Distribution of respondents, students by sex.

Percent %	Abundance		
54.6	195	Boy	
45.4	162	Girl	Sex
100	357	Total	

2.1. Metacognitive Questionnaire (MCQ-30)

To measure metacognitive beliefs, this questionnaire will be used, which has a 30-point self-report scale and measures people's beliefs about their thoughts. The material of this scale has four options. The metacognition questionnaire was made based on the S-REF pattern of Wales and Matthews (1994).

2.2. General Health Questionnaire

The questionnaire was developed by Hill and Goldberg in 1972 and has been widely used in several studies and is one of the most well-known screening tools in general health research.

2.3. Academic Self-Efficacy Questionnaire

The tool used in this study is the standard self-efficacy questionnaire for Jinx and Morgan (1999). This tool has 30 questions and three subscale areas: talent (1-10), effort (11-20) and texture (21-30). This questionnaire was designed based on the Likert 5-point scale and its validity and reliability were confirmed in various researches.

Statistical analysis of data

To describe the data, descriptive statistics such as mean, standard deviation, and for deduction of results for the first and second hypotheses were used by Pearson correlation method and for the third hypothesis, multiple regression was performed using SPSS software version 22.

3. Result

General health is able to predict a part of the variance of academic self-efficacy.

Table 2. Summary of the model, the degree of variance explained by the academic self-efficacy variable by general health dimensions.

Estimate the standard error	Adjusted coefficient of determination	coefficient of determination	Correlation	Model
17.712	0.125	0.145	0.381	1

As a result, Table 2 in this analysis is as high as 0.125 Equivalent to 12% the variance of academic self-efficacy variables is explained by general health dimensions.

Table 3. Analysis of variance by means of a sample of general health dimensions and academic self-efficacy.

significance level	F	average of squares	Degrees of freedom	Model		Model
0.001	15.598	4766.266	4	19065.07	regression	
		305.567	352	107559.7	left over	regression left over
			356	126624.8	Total	

The result of Table 3 shows that, with respect to the F value obtained, analysis of variance at a significant level of less than 0.01 Has been meaningful as 0.001.

Table 4. Statistical characteristics of regression coefficients between general health dimensions and academic self-efficacy.

significance level	t	Standard coefficients		Non-standard coefficients	Model
		Beta	standard error	B	
0.001	5.395		9.583	51.698	(Constant)
0.001	3.587	0.265	0.535	1.918	Physical sign
0.203	1.279	0.103	0.411	0.526	Signs of anxiety
0.246	1.164	0.095	0.429	0.499	Disturbance in social action
0.185	1.33	0.108	0.298	0.396	Symptoms of depression

Table 4 shows that according to the regression coefficient contained in the column (beta) and given the significant level achieved (at the level of 0.01) the component of the physical sign, for a standard deviation, was able to predict the self-efficacy variable with 26% positive effect. And the rest of the components, due to insignificance, have not been able to predict academic self-efficacy.

Second hypothesis: metacognitive beliefs can predict part of the variance of academic self-efficacy.

In order to investigate the effect of the predictor variable on the criterion variable, based on this hypothesis, the multivariate regression method is used in a concurrent way, the results of which are presented in the following tables.

Table 5. Model summary, variance level of academic self-efficacy variables by dimensions of meta-cognitive beliefs.

Estimate the standard error	Adjusted coefficient of determination	coefficient of determination	Correlation	Model
17.669	0.129	0.155	0.393	1

As a result of Table 5 in this analysis at a rate of 0.129 Equivalent to 13% the variance of academic self-efficacy variables is explained by the dimensions of meta-cognitive beliefs.

Table 6. Analysis of variance using the meta-cognitive beliefs and academic self-efficacy.

significance level	F	average of squares	Degrees of freedom	sum of squares	Model
0.001	12.623	3859.824	5	19299.12	regression
		305.771	351	107325.7	left over
			356	126624.8	Total

As a result, Table 6 shows that, given the obtained F-value, the analysis of variance at a significant level of less than 0.01 Has been meaningful as 0.001.

4. Discussion

General health is able to predict a part of the variance of academic self-efficacy.

This research is consistent with the free research of Marzabadi and colleagues [12, 10, 8, 17, 9, 11] To explain this hypothesis, it can be said that another variable that is thought to be related to self-efficacy is mental health. Mental health is one of the important components of public health Mental health is the ability to balance life and resist problems. Mental problems pose a significant pressure on individuals. Public health is the concept of feeling good and ensuring self-efficacy, self-reliance, competitive capacity, intergenerational membership, and self-actualization of potential intellectual, emotional and other capabilities. General health refers to four aspects (the objective adaptation of the person to the environment, the individual's mental adaptation to the environment, the actual adaptation, and the ability to recognize and access himself). Students have a special position as the thoughtful and creative human resources of each society. Therefore, their mental health is important in learning and raising scientific awareness. Many students are not familiar with the school environment at the time of arrival, separation and distance from the family, lack of interest, incompatibility with other people in the living environment, and lack of welfare and economic conditions and problems such as them, including conditions.

5. Conclusion

Health problems can cause or exacerbate mental illness and discomfort, and cause poor performance of students. Health is a broad concept, and its definition is influenced by the level of knowledge and attitudes of societies with different geographical and cultural conditions. In this Among the purpose of the uncle's health, which is meaningful in this research, is the component of physical health, it can be stated in one definition that physical health is the absence of disease, the absence of signs of the disease and the non-use of an apportionment leave, Given the findings and results obtained, it can be stated that students are covered by parents In the dimension of physical signs, they have been able to achieve a higher average, and this increases self-efficacy and further progress.

Second hypothesis: metacognitive beliefs can predict part of the variance of academic self-efficacy.

This research is consistent with the research by Yusufzadeh et al [13, 14, 18]. To explain this hypothesis one can say that one of the variables that can be associated with self-efficacy is meta-cognitive beliefs. Metacognitive Psychology is a new field of thought that dates back to the 1970s. Metacognition involves cognitive processes as well as experiences or cognitive regulation. Metacognitive knowledge refers to knowledge about cognitive processes and knowledge about how to use cognitive control processes, Metacognition plays a fundamental role in successful learning. In order to study the metacognitive activity and determining the effective factors in student thinking through meta-cognitive control, a successful learning study is important. Cognitive learning strategies, including subjective review, Expansion and organization, and metacognitive learning strategies include critical thinking and metacognitive self-regulation. Metacognition plays a fundamental role in successful learning. In order to study the metacognitive activity and to determine the effective components in the problem-solving of students through meta-cognitive control, the study of successful learning is important. Cognitive learning strategies include mental review, expanding and organizing, and metacognitive learning strategies including critical thinking and meta-cognitive self-regulation.

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References

[1] Cheung P, Spears G. (1994). Reliability and validity of the Cambodian version of the 28-item General Health Questionnaire. *Soc Psychiat Psychiatr Epidemil*.; 29 (2): 95-99.

[2] Dembo, M. H. (1996). Applying educational psychology. NewYork: Longman.

[3] Dweek, C. S. (2000) *Self theory*: Their role in motivation, personality and development. Philadelphia: Thylor and Francis.

[4] Foladvand Kh, Farzad V, Shahrara M, Sangari AA. Effectiveness social support, *academic stress and academic self-efficacy on mental – physical health*. 2008, pp: 81-93. [Persian].

[5] Flavell (1979). *Metacegnition and cognitive monitoring*: a new area of cognitive developmental inquiry. American Psychologist.

[6] Goldberg, D. and Williams, P. A. (1988) *Users Guide to General Health Questionnaire* (NEER-Nelson).

[7] Haddadi Koohsar AA, Roshan R, Asghar Nejad Farid AA. A Comparative Study of the Relationship Emotional Intelligence with Mental Health and Academic Achievement in Shahed and Non-Shahed Students in University of Tehran. *J Psych Educ* 2007; 37 (1): 73-97 (Persian).

[8] Hermann, Beth Ann (1990). *Cognitive and Metacognitive Goals in Reading and Writing*. In Duffy, Gerald G. (Eds), reading in the Middle School 2. (pp. 81-84). Newark, Delaware: International Reading Association.

[9] Kunushimoi, A. (1992) Association of attitude toward mathematics with Self- efficacy, causual attribution and personality traits. *Perceptual and Motor Skills*, 75, 563-567.

[10] Kim, Young- Ho. (2003) Correlation of mental health problems with psychological construction in adolescence: Final results from a 2-year study. *International Journal of Narsing studies*, 40, 115-125.

[11] Maddux, James E. (2000). *Self-Efficacy*: The Power of Believing You Can. Handbook of Positive Pcychology. New York: Oxford University P Ress.

[12] Molavi H. Validation factor structure and Reliability of the Farsi version of General Health Questionnaire 28 in Iranian students. *Pakistan J Psychol Res*. 2002; 17 (3-4): 87-98.

[13] Montague. Ac. (1992). *The multiple dimension of learning* 3 ED. Enge; wood cliffs. NJ: Prentice-Hall.

[14] Muris, P., Bogie, N., & Hoogsteader, A. (2002). Protective and vulnerability factors of depression in normal adolescents. *Behavioral Research and Therapy*, 39 (5), 555-565.

[15] Omokhodion FO. Psychosocial Problems of Pre-Clinical Students in the University of Ibadan Medical School. *Afr J Med Sci* 2003; 32 (2): 135-138.

[16] Pajares F, Schunk DH. *Self and self-belief in psychology and education*: A historical perspective. Improv Acad Achiev Impact Psychol Factors Educ. 2002; 3-21.

[17] Paris SG, Cross, D. R, & Lipson, M. Y (1984). Informed strategies for learning: A program to improve children s reading awareness and comprehension. *Journal of Educational Psychology*, 76, 1239-1252.

[18] Redmond B. *Self-efficacy theory*: Do I think that I can succeed in my work? Work attitudes and moti-vation 2010. *Available from*: https://cms.psu.edu.

[19] Schoenfeld, A. (1985). *Mathematical Problem Solving*. San Diego, CA: Academic Press.