Help-Seeking or Help Avoidance: Important Motivational, Personality and Metacognitive Antecedents Role in Help-Seeking and Help-Avoidance between Normal and Gifted Students

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Abstract

Educational help-seeking is one of the important self-regulation strategies that plays an important role in students learning process. The purpose of current study was investigation of the relationship between motivational, personality and metacognition variables in educational help-seeking and help avoidance for mathematics. The sample for the study consisted of 557 high school students in Bushehr city who were selected randomly from the high school population in Bushehr, and completed NEO-FFI questionnaire and Zushu and Barnett Cognitive- Motivational Strategies Questionnaire. Regression analysis results showed that metacognition, task value and conscientiousness were the educational help-seeking predictors and neuroticism, metacognition and task value predicted the avoidance of help-seeking. ANOVA results indicated that from the expectation for success and tasks value, gifted students are higher than normal students and in agreeableness trait normal students have more scores than gifted students. Results indicated that many numbers of factors affect educational help-seeking behavior that all them would seal the help seeking is a positive strategies in learning.

Key words: help-seeking, help avoidance, motivation, metacognition, personality, gifted.

Introduction

Occurrence of situations that students encounter with ambiguity in doing home works or problem is unavoidable, therefore need for help-seeking is appearing in education. In these cases, the adaptive response is that they use another person as a subsidiary source for solving their problem and continue the learning process (Newman, 2010; Ryan, Pentrich and Midgley, 2001). Newman (2002) defined help-seeking as seeking help from others when they encounter with ambiguity or difficulty. In this perspective, help-seeking is considered as a motivational learning strategy and a kind of social interaction.

Students may use help seeking strategies in order to increase their learning skills. Helpseeking is a mechanism to prevent educational failure. This mechanism involves behaviors such as asking questions from teacher, parents or classmates; demanding more explanations about exercise, understanding solutions and search for other academic support. Help-seeking benefits students in a way to decrease their academic problem and also advance their learning skills to solve the problems. Nevertheless, Help-seeking mechanism is not always adaptive. There are some major differences between the adaptive help-seeking and Non-adaptive help-seeking strategies. First of all, as a mean to improve the knowledge and skills, students should know when and how to use this mechanism (Karabenick and Newman, 2006), secondly, Requesting help should be Purposeful which means the help seeking should not provide just current need solution but also guarantee a long term result (Mihlon, 2010). According to Newman (2006; Williames and Takaku, 2011) adaptive help seeking is contingent upon a student's recognition of the need for help, knowing what type of help to seek, and whom to ask. Nonadaptive help seeking, on the other hand, involves two courses of action as seeking assistance when it is not needed and avoidance help-seeking.

Some students may, without trying to do task, ask for help. These students are more interested in finding answers than understanding the task. In addition, some students might not ask any help because their classmate might find them Incompetent and dumb (Newman, 2010). There are some barriers in help-seeking, for example: inability to understand or accept the need to help, inability to act in accordance with requirements, attitudes and beliefs about help-seeking or Perceived that help is not helpful (Parakachat, Gubbins, Ragland, Norman, Flowers, Stowe and Dehart, 2013; Bons and Flayn, 2010).

In this survey, we study the role of help-seeking as an important strategy of self-regulation in learning process. The main focus of research in this area is on the relationship between self-regulation of motivational and cognitive variables. Therefore, we try to examine the role of metacognition and motivational variables. Previous researches suggest that help-seeking behavior by students is affected of an motivational -emotionally system, thus the personality and emotional characteristics such as shyness, introversion / extroversion also should be study in future. With regard to this proposal and due to the lack of research done in this area, This study examines the impact of personality variables (Based on the five factor model of personality) on help seeking and avoidance of help. Also, we compare between normal and gifted students base on the variables listed above.

Overview of the study

Unfortunately, the results of some research show that learners benefits more from seeking help are less likely to seek help meet (Mihlon, 2010). Based on these findings, we review why some students avoid help-seeking despite their needs while others are searching for. To achieve this goal, the impact of Motivational factors, personality and cognition factors on help-seeking behavior and avoidance help-Seeking between normal and gifted students is examined.

Metacognition which is thinking about thought can be described as an individual knowledge about cognitive processes and products related to those (Coskun, 2010). cognitive development including: the growth of cognitive abilities such as gaining more knowledge, understanding and control on learning, selecting strategies, monitoring on learning, correcting errors, analyzing the effectiveness of learning strategies, and changing learning behaviors and strategies when it is necessary (Ridley, 1992; Coskun, 2010). In general, the use of metacognitive strategies leading to active thinking and improve learning performance (Coskun, 2010). According to Zusho and Barnet (2011) Can assume that the use of metacognitive strategies, increases the likelihood of seeking help, we tested the hypothesis.

We explored the role of expectation for success and task value -as motivational variables- on help seeking. Further investigations on the help-seeking, has focused on self-efficacy not necessarily on the expectation for success. Since research has shown that self-efficacy beliefs are the basis for most students in their performance expectations, it seems that expectation for success significantly predict help-seeking model (Zusho and Barnet, 2011). Task value which is students' believes about the usefulness and importance of subjects, because it is considered as an adaptive motivation and its linkage with mastery goals was studied.

In addition to the factors mentioned in this study for the first time, the role of personality variables in help-seeking behavior of students was evaluated. In recent years, psychologists are considered the Big Five personality model as a popular approach for studying the personality characteristics. From the perspective of this model, human is a rational beings can justify his behavior and personality (Gostav and Mc Crae, 1995). According to this model, a personality can be

described by five strong factors that include: Neuroticism, Extroversion, Openness to experiences, A^{greeableness} and Conscientiousness. According to the characteristics of each of these personality types, we hypothesized that extraversion; Conscientiousness, openness and agreeableness with help seeking and help avoidance with Neuroticism may be associated.

Researches on gifted and normal students indicate differences in their knowledge of selfregulation strategies. However, there is little research that considered the difference between students' use of these strategies (Greene, Moos, Azevedo and Winters, 2008). Relying on most previous studies, it can be said that contrary to popular opinion help-seeking is strategy that used by gifted learners (Mihlon, 2010). Thus, the present study attempts to differentiate between normal and gifted students from applying motivational factors, personality and cognition factors.

Methodology

The study population consists of all male and female high school students in normal and gifted schools in Boushehr city. These students are chosen from first grade to four grade in 2012-2013 academic years. From this group 557 students are chosen randomly, 222 students from gifted schools and 335 students from normal schools. After coordination with school officials, the researcher was present in the classroom at a designated time and asked the participants in the normal classroom to complete the questionnaires. Because mathematics is one of the most difficult courses for students needing help in, students were asked to imagine being in math class given their feelings about math class when answer questions about help-seeking and help avoidance. In order to measure the variables, the Big Five personality traits Questionnaire (Gostav and Mc Crae, 1992) and Cognitive - Motivational Strategies Questionnaire (Zusho and Barnett, 2011) are used.

NEO- FFI: The questionnaire with 185 items, first in 1985 as Neo was developed by Costa and McCrae. Then, based on this questionnaire form with 60 items and 240 were also made by the same researchers (Pytlik zillig, Hemenover and Dienstbier, 2002). In this study, NEO questionnaire containing 60 items (NEO-FFI-60) is used and measures the five factors of Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. NEO questionnaire are made to obtain useful measurements of five basic personality factors. McCrae and Costa et al (2004) conducted a study on 1492 adults. The results reported Cronbach's alpha coefficient factors neuroticism, extraversion, openness, agreeableness and conscientiousness, respectively, 0.86, 0.80, 0.75, 0.69 and 0.79. The correlation coefficient of this questionnaire with 240 items of questionnaire NEO for five factors neuroticism, extraversion, openness, agreeableness and conscientiousness, agreeableness and conscientions, penness, agreeableness and conscientiousness, were respectively, 0.83, 0.91, 0.76 and 0.86.

Cognitive - Motivational Questionnaire Zusho and Barnett (2011): The questionnaire consisted of three parts and total of 70 items base on the MSLQ (Motivated Strategies for Learning Questionnaire) and PALS (Patterns of Adapted Learning Scales) questionnaire. In this study, only some of numbers come up in the questionnaire are used. Coefficient for the intended material in Zusho and Barnett study are: expectation for success of 4 items with alpha coefficient 0.86; task values with 3 items and alpha coefficients of 0.78; metacognitive self-regulation with 7 items and alpha coefficient of 0.71; Help-seeking tendencies with 4 items and coefficient alpha of 0.74 and help avoidance with 5 items and alpha coefficient of 0.79. The validity of this scale has been calculated using factor analysis which indicates that the scale consists of five dimensions: the motivational, cognitive and metacognitive domains, the goal orientation, the overall cognitive beliefs and self-report help seeking. In the present study the reliability of this scale was calculated by using Cronbach's alpha coefficient. The results show: Expected for the success of 0.85, the task value of 0.72, Metacognitive, 0.77, tends to seeking help, 0.72, and avoidance help 0.76. Validity of the study was examined by factor analysis. Results show that distinctive elements in total explained 57.99% of the variance.

Results

To determine the relationship between help-seeking and help avoidance with predictor variables, the Pearson correlation coefficients were calculated, the results are presented in Table 1. According to the table, help- seeking with the expectation for success (r=0.36), task value (r=0.39), metacognition (r=0.48), neuroticism (r=0.11), extroversion (r=0.27), openness (r=0.21), agreeableness (r=0.17), and conscientiousness (r=0.32) has a positive correlation at a significance level of p<0.001. Also help avoidance with metacognition (r=0.13), neuroticism (r=0.24), openness (r=0.16), agreeableness (r=0.15) has a positive correlation at a significance level of p<0.001 and conscientiousness (r=0.08), task value (r=-0.07), expectation for success (r=-0.03) and extroversion (r=0.04) at the level of p<0.05 was not significant.

 Table 1. Pearson Correlations between motivational, cognitive, personality and help seeking measures

Variables	1	2	3	4	5	6	7	8	9	10
1. Help seeking	1									
2.Help avoidance	-0.06	1								
3.Neuroticism	0.11**	**0.24	1							
4.Extroversion	0.27**	0.04	0.30**	1						
5.openness to	0.21**	**0.16	**0.33	0.49**	1					
experiences										
6.Agreeableness	0.17**	0.15**	0.38**	0.46**	0.49**	1				
7.Conscientiousn	**0.32	0.08	**0.29	**0.62	0.50**	**0.51	1			
ess										
8.expectation for	**0.36	-0.03	0.07	0.26**	0.21**	**0.13	**0.34	1		
success										
9.Task value	0.39**	-0.07	0.07	0.29**	0.18**	**0.11	0.32**	**0.63	1	
10.Metacognition	0.48**	0.13**	0.09*	**0.29	**0.24	0.15**	0.38**	0.53**	0.50**	1
** 0.001	* 0.05									

* *p =0.001 *p=0.05

To study the effects of predictive variables from multiple regression analyzes with stepwise method were used. The results are given in Table 2.

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TableZ	Hein-seeking	regression	analysis h	w nemo	nredictive	variahles
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Criterion	Predictive	MR	RS	F (p)	Regression coefficients		
variable	variable				metacognition	Task	conscientiousnes
						value	S
	metacognition	0.486	0.23	172.08	β=0.486		
				(0.001)	t=13.11		
					p<0.001		
Help	Task value	0.511	0.26	97.92	β=0.388	β=0.185	
seeking				(0.001)	t=9.00	t=4.28	
					p<0.001	p<0.001	
	conscientiousness	0.529	0.27	70.30	β=0.349	β=0.163	β=0.134
				(0.001)	t=7.87	t=3.76	t=3.37
					p<0.001	p<0.001	p<0.001

In this table, the metacognition, task value and Conscientiousness predict 27% of the helpseeking variance in students and metacognition is the best predictor for help seeking in this sample, Openly accessible at <u>http://www.european-science.com</u> 3406

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and linear combination of the predictor variables with help- seeking with MR= 0.52 and RS=0.27 and F=70.30 at the level of p<0.001 was significant.

Criterion	Predictive variable	MR	RS	F (p)	Regression coefficients			
variable					neuroticism	metacognition	Task value	
	Neuroticism	0.242	0.06	34.42	β=0.242			
				(0.001)	t=5.86			
					p<0.001			
Help	Metacognition	0.267	0.07	21.32	β=0.230	β=0.115		
avoidance				(0.001)	t=5.60	t=2.79		
					p<0.001	p<0.005		
	Task value	0.315	0.10	20.34	β=0.222	β=0.221	β= - 0.197	
				(0.001)	t=5.45	t=4.60	t= -4.13	
					p<0.001	p<0.001	p<0.001	

Table 3. Help-avoidance regression analysis by using predictive variables

Also, neuroticism, metacognition, and task value, in total predicted 10% of the avoidance help avoidance variance in students. Neuroticism is the best predictor for help avoidance in students and the linear combination of the predictor variables with help avoidance with MR= 0.31 and RS=0.10 and F=20.34 at the level of p<0.001 was significant.

To examine the hypothesis that there is a difference between normal and gifted students in motivational, cognitive and personality variables, multivariate analysis of variance was used. Results showed that is significant different between normal and gifted students (F=3.14). Table 4 shows ANOVA results.

source	variable	Sum of	df	Mean	F	Sig	Partial Eta
		squares		square		(p)	squares
	expectation for success	797.817	1	797.817	18.532	0.001	0.32
	Task value	251.353	1	251.353	10.489	0.001	0.19
school	.Metacognition	30.317	1	30.317	0.338	0.561	0.001
	Help seeking	18.913	1	18.913	0/519	0.471	0.001
	Help avoidance	78.539	1	78.539	1.361	0.244	0.002
	Neuroticism	16.241	1	16.241	0.395	0.530	0.001
	Extroversion	28.111	1	28.111	0.926	0.336	0.002
	openness to experiences	6.168	1	6.168	0.217	0.642	0.001
	Agreeableness	128.282	1	128.282	4.126	0.043	0.07
	Conscientiousness	10.775	1	10.775	0.368	0.544	0.001

Table 4. Comparison of normal and gifted motivational, cognitive and personality variables

The results ANOVA showed that there is a significant difference between normal and gifted students in the expectation for success (F=18.53, p<0.001), task value (F= 10.48, p<0.001) and Agreeableness (F=4.12, p<0.05). But there were no significant differences in other variables. Comparisons indicated that difference in the expectation for success and Task value benefit gifted students while in Agreeableness, normal students scored higher.

Conclusion

This study was a multi-purpose study: firstly, we exam metacognition, expectation for success and task value for predicting help avoidance or help seeking students. Secondly, we tried to answer the question whether students' help-seeking behavior is influenced by their personality traits

and can we predict students' help-seeking behavior through their traits. Finally, we tried to compare normal and gifted students. The results of the regression analysis show that, metacognition, task value and Conscientiousness predicted 27% of the help-seeking variance in the students. The neuroticism, metacognition and task value variables in total predicted 10% of help-avoidance variance in students.

Metacognition is defined as "knowing about knowing", Can act the knowledge about when and how to use particular strategies for learning or problem solving (Metcalfe and ^{Shimamura}, 1994). As expected, this variable could be the strongest predictor of help-seeking. Students due to their metacognition realize their less of knowledge and use help-seeking strategy to compensate it and improve their performance and learning skills (Anderson, 2002; ^{Coskun}, 2010). This finding proves Karabenick believes that if help-seeking is truly an adaptive strategy, should be directly related to other cognitive and metacognitive strategies frequency that are in use (Karabenick, 1987; ^{Mihlon}, 2010). Also in this study, metacognition was the negative predictor for help-avoidance. This can be explained by a positive correlation between metacognition and need for cognition (^{Zusho} and Barnett, 2011) which means More needs for cognition the person more than aware about his thoughts and reasoning. Hence, this could be an explanation for why people with strong cognition, may not rely on others to help and avoidance helping seeking.

Modern expectancy- value theory (Eccles and Wigfield, 2002; Liem, Lau and Nie, 2008) assumes that about students' beliefs about their ability to perform a task successfully and their beliefs about the value and benefits of pursuing the task (task value), are the two key components to understand their progress behaviors and academic results. Our findings revealed that there is a positive relationship between students' believes about useful assignment with a request for help to complete the task, even value task is able to predict the help-seeking. These findings are compatible with Wigfield findings (2011) that showed a positive relationship between help-seeking, selfefficacy with task value. Eccles et al (1983; Eccles and Wigfield, 2002) posited that the task value consists of four components; attainment value, intrinsic value, utility value, and cost. attainment value refers the importance of being successful. Intrinsic Value is involved pleasure in task. utility value means utility of task that is defined based on a person's future goals, and cost the perceived negative consequences of involvement in the task. It seems that when the assignments of students are useful, practical, enjoyable and consistent with their perceptions of their future goals, they become interest to engage in the task, and even willing to accept the outcomes and costs (e.g., their threat - a prized from help-seeking). Also, this variable was a negative predictor for help avoidance when students find their task useless and not practical, they do not involve themselves in helpseeking costs.

Conscientiousness with features such regularity, efficiency, reliability, self-regulation, oriented, and reasonable progress is described. The research of Komarraju, Karau and ^{Schmeck} (2009) shows that conscientiousness, predict intrinsic motivation and has a positive significant relationship with academic achievement. Conscientiousness has a negative relationship with lack of motivation that means students who have high self-regulation system is less likely to show disengagement and latitude (Komarraju, Karau and Schmeck, 2009). In the present study, conscientiousness was only a personality predictor for help-seeking. Conscientious students have high self-regulation use help-seeking strategy to improve their performance. They are goal-oriented and disciplined in planning make them use help-seeking mechanism as a mean to achieve their goals. Neurotic individuals experience more anxiety, depression and negative affect. So, it seems more likely to consider help-seeking as a threat to self-esteem and self-worth therefore avoiding to help seeking. As far as expected, the best predictor of personality factors in the present investigation was to avoid seeking help.

The analysis of variance show in comparison between normal and gifted students, there is a significant difference in variables such as expectation for success, task value, and Agreeableness. This means that gifted students on questions related to expectation for success and task value than normal schools had higher scores. It is likely that this difference is caused by environmental influences and educational oats in schools. Teachers emphasize on the intrinsic value of learning and knowledge as well as emphasizing the usefulness and importance of striving for success can affect success expectations and beliefs about the task value. Although careful judgment in this matter should be subject to further study, but it seems that gifted schools have these circumstances. On the other hand, scores in normal schools of agreeableness was higher than students in the gifted students have the ability to have a higher IQ, are more likely to have Independence in their decisions while normal students accept others' opinions much easier. In sum, our findings suggest that Students with metacognitive ability, adaptive motivation, and conscientiousness is more likely to ask for help and are less likely to avoid seek help when need to it.

Therefore, to facilitate this important strategy, Education professionals have to design classes based on mastery goal orientation, emphasize on the value of learning and understanding of content or explain about the usefulness and application of academic tasks. Students should also be encouraged to use more cognitive and metacognitive strategies. The teachers are aware of personality differences can probably build learning environments will change the way that improve students' strengths. For example, creating a structured environment with clear policies could encourage students to learn about the organization and discipline about learning.

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