

## Introduction

Education is one of the most essential concerns of each educational system in all the societies. Students' academic performance and success indicate the success of the related educational system of the society in targeting and meeting the individual needs of the students. Therefore, an educational system can be regarded successful once the students in that system show the best academic performance in every grade (Moradi Moghadam, 2004).

Atkinson (1998) considered academic performance as learnt or acquired ability resulted by the provided subjects in school or in other words the learnt or acquired ability of an individual in school subjects which is measured by the standardized tests (quoted by Seif, 2011).

Academic performance depends on a variety of factors which can affect the performance of the individuals under certain conditions in school context. These factors are as follows: individualistic background factors, social-cultural factors and individual features. Among individual features, personality variables affecting the learning process. Research reveals that personality factors determine academic performance of students (Tabe' Bordbar, 2012). Personality is defined as the internal systems of affections, emotions, cognitions and conceptions of an individual and determines the unique reactions of a person to his environment (Dole & Schroeder, 2010). Personality is a dynamic organization within a person which consists of physical-psychological systems and these systems in turn determine the unparalleled patterns of feelings, thoughts and behaviors (Poursharifi and Mehryar, 2003). One of the theories of personality dimensions is the five-factor personality model by Robert McCrae and Paul Costa. The five-factor personality model divides people into five categories as follows: neuroticism, extroversion, conscientiousness, agreeableness and openness (Costa & McCrae, 1992).

Neurotic persons are sad, melancholic, angry and prone to develop depression (Howard and Howard, 1998). Extroverts tend to verbal and physical activities mostly. Extroverts are adventurous, sociable, bold, active and talkative (Costa and Mac Rae, 1992). Conscientious persons are efficient, disciplined and responsible; they have a great deal of orderliness in their affairs and are bound to their commitments (Booth-Kewley & Vickers, 1994). Agreeableness is identified with devotion and self-sacrifice. Agreeable persons are humble, warm, sympathetic, kind, polite and reasonable and while confronting life incidents are more flexible and

adaptable (Costa & McCrae, 1992). Persons with openness personality trait are recognized by the tendency to experience features like curiosity, creativity, utopianism, art-ism and modernism (Howard and Howard, 1998). Each person according to their personality traits described in the model above can have different levels of academic performance and can adopt various standpoints towards it (Tabe' Bordbar, 2012).

The other factor that can affect the students' academic performance is self-regulated learning (Esmaeli, 2013). Self-regulation is planning according to self-observation which controls behaviors continuously in order to achieve the goals. Self-regulated learning indicates the active personal participation in learning, a self-regulated learner tries to progress even without supervision and therefore monitors his learning process and evaluates it (Zimmerman, 2000). Self-regulated learning is an important issue for human's learning process and the educational psychologists emphasize on active personal participation in learning rather than passive learning (Man-Chih, 2006). Self-regulated learning theory was brought up by Pintrich and De Groot for the first time (1990), they considered self-efficacy, assignment valuation and test anxiety as motivational beliefs and introduced cognitive and meta-cognitive strategies and students' effort and planning as self-regulated learning.

In our educational system, students usually are confronted with a number of problems and do not have appropriate performance and a part of this inefficiency is related to the lack of proper knowledge regarding learning and early disappointment while facing with problems and the personality traits of the students also play a role here (Shabani and Shafipour, 2003). Therefore, considering the factors that increase students' academic performance and decrease their tension and anxiety can pave the way for the educational system's further progress. In this regard, this study aims at examining whether self-regulated learning and personality features are correlated with students' academic performance or not?

## Materials and Methods

This research is an applied one and the method used to conduct it was descriptive-correlational. The statistical population of the research consists of the whole second grade high school students in Eghlid in the academic year 2014-2015 and via multistage random cluster sampling eight schools were chosen in Eghlid and one class was randomly selected in every school and all the students of the class were

directed to take part in the presented paper as a statistical population.

In order to collect data three different types of questionnaire were used:

Research instrument

A) *NEO Five-factor Personality Inventory (shortened version)*: This inventory is a shortened version of NEO personality inventory (the revised form) which is provided to measure big five personality traits of adults. The inventory has 60 items and aims at assessing five personality factors including: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. Each of these factors are assessed by 12 questions. The respondents are wanted to answer the questions which are based on 5-poin Likert scale (from completely agree to completely disagree).

B) *Self-regulated Learning Inventory*: The inventory which was made by Pintrich and De Groot in 1990 consists of two scales which are self-regulated strategies and motivational beliefs. Motivational beliefs have three subscales including self-efficacy, assignment valuation and test anxiety and the scale self-regulated learning in itself has two subscales such as cognitive and Meta-cognitive strategies, the items of the inventory is based on 7-point Likert scale (from completely true to completely untrue). The inventory has 44 items which allocates 9 items to self-efficacy, 9 items to assignment value, 5 items to test anxiety, 12 items to cognitive strategies and 9 items to meta-cognitive strategies.

C) *Academic Performance Inventory*: This questionnaire was designed by Pham and Taylor in 1990 and composed of 48 items. While scoring each item consists of 5 options and each option has its own score as follows: 1 is attributed to not at all, 2 to rarely, 3 to often, 4 to usually, 5 to always and in 11 questions which are negatively designed the scoring method is inverse (questions number 6, 7, 8, 9, 15, 14,16, 17, 18 ,20).

The analysis of the data obtained from the inventory was done in two stages including descriptive and analytical statistics. In descriptive statistics stage the statistics such as frequency, percentage, mean and standard deviation were applied and in analytical statistics stage initially to make sure about the normal distribution of the data, the Kolmogorov-Smirnov test was applied and then to identify the correlation between the variables Pearson correlation coefficient method was used and finally to predict the variables simultaneous multiple regression method was utilized.

**Results**

In order to test this hypothesis Pearson correlation coefficient was used and its findings are displayed in table 1.

Table 1. Correlation coefficients of personality traits variable with the academic performance of students

Variab les	neuro ticism	extrov ersion	agreea bleness	open ness	conscient iousness
Acade mic perfor mance	- 0.343 *	0.184	0.355* *	0.19 3	0.482**

As we can see in table 1 neuroticism correlates with academic performance at the significance level below 0.05 inversely, and agreeableness and conscientiousness correlate with academic performance significantly at the significance level below 0.01.

Personality traits are able to predict students' academic performance significantly.

In order to examine this hypothesis we used multiple regression method and the results are shown in table 2.

Table 2. Prediction of academic performance based on personality traits

Variables	B	T	P<	R	R <sup>2</sup>	F	P<
Neuroticis m	- 0.2 34	- 1. 94	- 0.0 5	0.5 47	0.2 99	4.6 12	0.0 01
Extroversio n	0.0 52	0. 42	0.6 76				
Agreeablen ess	0.1 18	0. 86	0.3 89				
Opennessto experience	0.0 65	0. 53	0.5 98				
conscientio usness	0.3 21	2. 10	0.0 4				

According to the table 2 it can be understood that the values of F and its significance level reveals the significant effects of variables in regression equation. The acquired regression effect (F=4.162) which is significant at the level of 0.001 and is the determination coefficient calculated based on variables (0.299) i.e. these variables predict 29 percent of the variance regarding the variable academic performance. On the other hand concerning Beta and the significance level of T we realized that the aspects of neuroticism inversely predicts students' academic performance and conscientiousness directly predicts it.

Self-regulated learning and its aspects correlate with students' academic performance significantly.

In order to examine the hypothesis Pearson correlation coefficient method was applied and the findings are shown in table 3.

Table 3. correlation coefficients of self-regulated learning and its aspects with students' academic performance

Variables	Self-efficacy	Assignment valuation	Test anxiety	Cognitive strategies	Meta-cognitive strategies	Self-regulated learning
Academic performance	0.235	0.325*	0.082	0.293*	0.465**	0.364**

As it is mentioned in table 3, self-regulated learning and meta-cognitive strategies correlate positively with students' academic performance at the level below 0.01 and assignment valuation and cognitive strategies correlate with students' academic performance directly and significantly at the level below 0.05.

Self-regulated learning and its aspects can predict students' academic performance significantly.

In order to examine the hypothesis we applied multiple regression method and the results are shown in table 4.

Table 4. Students' academic performance prediction based on self-regulated learning and its aspects

Variables	B	T	P<	R	R <sup>2</sup>	F	P<
Self-efficacy	0.201	0.836	0.407	0.492	0.242	3.44	0.009
Assignment valuation	0.314	1.307	0.197				
Test anxiety	0.029	0.226	0.822				
Cognitive strategies	0.027	0.162	0.872				
Meta-cognitive strategies	0.415	2.66	0.01				

As we can see in table 4, the significance level of F shows that the variables have significant effect in regression equation.

The regression effect (F=3.44) obtained which is significant at the level of 0.009 is the determination coefficient calculated based on the variables (0.242) i.e. these variables predict 24 percent of the variance regarding students' academic performance. On the other hand considering the value of B and the significance level of T we come to know that only meta-cognitive aspect can predict students' academic performance directly.

**Discussion**

Students' personality traits correlated significantly with their academic performance.

Students' personality traits are able to predict their academic performance.

According to table 1, neuroticism correlates with students' academic performance significantly and inversely while agreeableness and conscientiousness

correlate with academic performance directly and positively.

These findings are aligned with the findings based on the research conducted by Westerman et al (2002), Naurayi and Cherry (2003), O'conner and Paunon (2007), Ciorbea and Pasarica (2013), Izadi and Mohammadzadeh (2013), Keshavarz et al (2014). Naurayi and Cherry (2003) revealed that neuroticism correlates with academic performance negatively and significantly and agreeableness, extroversion, openness to experience and conscientiousness correlate with academic performance positively and significantly. Ciorbea and Pasarica showed that personality type correlates with academic performance significantly. People with neurotic personality type have lower academic performance while people with extrovert and agreeable personality type have higher academic performance.

To explain the negative correlation between neuroticism and academic performance it can be said that neuroticism include a series of features such as person's tendency to experience anxiety, tension, hostility, impulsiveness, shyness, depression and low self-esteem and all these features will cause inability to control negative emotions and making an stable positive relationship. So that Johnson et al determined that low levels of positive affections and high levels of negative skills will lead in deterioration of relationships. According to Kaglin, Houston and Hats (1990, quoted by Hosseini Nasab et al, 2009) the more neuroticism exists in an individual's personality, the more he tends to show negative behaviors to people. Thereore, it is normal that neurotic persons are not able to connect to those around them positively and have a good performance in class and also these persons experience more test anxiety and tension and this would lower their performance academically. To describe the positive correlation between agreeableness and academic performance it can be mentioned that agreeableness is composed of trust, honesty, assertiveness, altruism, obedience, moderation and humility (Jafari, 2008). This characteristic creates a soul of obedience and closeness among the students and also it brings up features like vitality, liveliness and somehow sociability and all these can have positive effects on academic performance. Lounsbury et al (2010) approved the fact that sociability and vitality can help increasing academic performance and tackling learning issues. The other explanation that justifies the fact that agreeableness increases students' academic performance is that because of their vitality and more flexibility, the agreeable

personality types resist more efficiently against the academic problems and tensions and this is a barrier to academic performance fall and it will help students to perform more effectively. In order to expound on the positive correlation between conscientiousness and academic performance it suffice to say that in many cases it is the strongest predictor for academic performance. This strong and positive correlation is expected due to the main characteristic of conscientious personality types. These persons do their assignments with accuracy and try to improve their performance and then their academic success, they have a great sense of responsibility. Conscientiousness have different dimensions such as efficiency, discipline, progress-seeking, self-restraint and reflection (Linon and Goodstein, 1990, translated by Naghshbandi et al, 2009) and these dimensions would promote perseverance and diligence in students and as we all know if assiduity increases in learning comprehension and efficiency would be much better and students' academic performance will improve.

According to table 2, after neuroticism which predicts students' academic performance inversely, conscientiousness is able to predict it directly.

These findings are compatible with the findings of Rezaei et al (2013) and Jafari (2012). Rezaei et al (2013) proved that the motivational belief regarding self-efficacy contributes the highest rate in humanities students' performance; agreeableness and conscientiousness affect science students' academic performance the most. Jafari (2012) examined the relationship between personality traits and methods of study and academic achievement in undergraduate students of Allameh Tabatabai University in Tehran. Multiple regression analysis showed that the method of deep and superficial studying and personality traits of conscientiousness, neuroticism and extraversion have the ability to predict academic achievement.

The results showed that neuroticism is a negative predictor of academic performance, this dimension of personality traits is including susceptibility to false beliefs, poor impulse control and a tendency to experience psychological distress in the form of anxiety, anger, depression, embarrassment, disgust and a range of negative emotions. Therefore neurotic students possess negative feelings and hold a negative view regarding class, education and higher studies and believe that they would be successful in their studies and this negative energy decreases students' abilities and suppresses their mental strength and perseverance, such behaviors disappoint a person in educational contexts and lead them to academic failures and quitting studies. In

order to explain the positive prediction of academic performance by conscientiousness it can be mentioned that this personality trait indicates mental stability of a person and his decisiveness about a plan he makes and it includes a continuous effort to reach the goals and serious obedience from principles which help students to stick to their academic goals and to give their best tries to appear successful in school, when a student can reach to his goals in school, he will be appreciated by his family, school authorities and society and this will lead in the formation of self-esteem and self-belief and bolster student's motivation for further studies and endeavors. We should mention that a conscientious student feels obliged to embark on studying the subjects taught in school after he is discharged from school and this will improve the speed of learning and the quality of it as well and the student with spending less time learn the subjects he has been recently taught, in addition to reinforcing his confidence and learning capabilities, the student will have a better academic achievement.

self-regulated learning and its subscales correlate significantly with students' academic performance. Self-regulated learning and its subscales predict students' academic performance.

According to tables 3 and 4, self-regulated learning and its subscales correlate directly and significantly with students' academic performance and among the subscales of self-regulated learning assignment valuation, cognitive strategies and meta-cognitive strategies correlate directly and significantly with students' academic performance.

This findings are consistent with the research findings of Woltres (2004), Bembenutty (2008), Sevgi and Ozacan (2010), Gardio- Vargas (2012), Kajbaf et al (2003), Namdarpour (2008), Atayifard and Shaghghi (2010) and Kiyamarsi et al (2011), Mirzayan et al (2012) and Sedghpour and Azimi (2014).

In explaining the relationship between self-regulated learning and academic performance it can be said that in theory of Pintrich (1999, quoted by Tabatabaie et al, 2012) the students who use self-regulated strategies the most at the same time their teachers are teaching or when they study on their own can increase their learning abilities and academic achievements via giving meaning to the subjects they learn, making logical connections with the prior information, mastery over this process and creating a good learning environment. Therefore, persons equipped with self-regulated learning strategies act ponderously and have more confidence their understanding and cognitive abilities are better and they have precious academic

motivations and these all will bolster their academic achievements.

The research findings signifies that between assignment valuation and academic performance there exists a positive and significant relationship. In this context we can say that assignment valuation is the importance that student gives to his assignments and his belief about it and the objective he seeks in doing so. Research show that the students who have motivations to conquer their assignments use more cognitive and meta-cognitive strategies and this will lead the better usage of mental power and activates the student in learning process, thus assignment evaluation is effective in academic performance improvement. Alborzi and Samani (1999) believe that assignment valuation via the role it plays in person's utilization of self-efficacy and cognitive strategies, affects academic performance. In order to explain the positive correlation between cognitive and meta-cognitive strategies with academic performance, it can be mentioned that because cognitive and meta-cognitive strategies include rehearsal, expansion strategies, organizational strategies, strategies for monitoring and understanding, emotional strategies, Planning and supervising of the learning (Weinstein and Mayer, 1986), we can realize that these strategies create active learning in students and provide an appropriate context for the person to develop a positive view regarding himself and his capabilities and causes better academic performance.

According to table 4 only meta-cognitive aspect can directly predict students' academic performance.

These findings are consistent with the findings of Amini (2008), bambutti (2008) and Pang (2012). Amini (2008) showed that all the factors of self-regulated learning have the ability to predict academic performance. Bambutti (2008) revealed that self-regulated learning is a predictor for academic performance. Pang (2012) conducted a research regarding the role of self-regulated learning in academic achievements of students. Research findings showed that self-regulated learning aspects play a significant and positive role in students' academic performance.

In order to explain the finding it can be said that meta-cognitive strategies consist of perceptions, behavior or action which learner apply while learning. The aim of the strategies is helping with learning, organizing and storing knowledge and skills and their utilization in the future (Seif, 2011). Therefore a person who applies these strategies will act better while returning the contents he has learnt and will have better confidence and will perform

efficiently in the exams. Metacognitive strategies are used for planning, Overlooking, and modifying cognitive functions (Brawn et al, quoted by Samadi, 2008). Planning encompasses a range of activities such as goal setting, strategy selection, time allocation, determination of the method used for implementation supervision, determining the criteria for evaluation and selection of reform strategy. Supervising or controlling cognitive processes makes it possible for the person to control his cognitive processes continuously and address and troubleshoot the issues which block his way to achieve his goals. Thus a self-regulated learner, tries to learn without other people's supervision, direct his activities and assess them and so he will learn the contents better and will attend the exam session more prepared and while taking the exam he is better in remembering the contents he has learnt and ultimately we can conclude that his performance will improve. The finding of Bambutti (2008) revealed that a lot of learners who can adjust and control cognitive and motivational aspects of their learning performance are as very successful learners and will have better academic performance. According to the findings of the research we suggest the authorities to take some actions as follows to improve students' academic performance:

Research findings showed that students' personality traits correlates to their academic performance significantly. In this context considering the fact that the stable personality and learning traits can help the effectiveness of training courses while entering these course, the identification of the personality structure of learners and adopting educational patterns which fit them plays a vital role in education so that a number of methods for effective curriculum can be suggested.

Research findings revealed that self-regulated learning strategies play a positive role in mathematic improvement. Thus, it is suggested that schools hold classes in which student are taught about self-regulated learning strategies and the techniques and concepts concerning self-regulated learning be included in curriculum and educational programs.

The inclusion of self-regulated learning techniques and concepts in the educational programs, life skills training and optional subjects.

In order to develop the positive personality traits and self-regulated learning in students, teachers are needed to take part in the corresponding courses and workshops and be trained in this field to make them able to help the students to grow and learn self-regulated strategies efficiently.

**References**

1. Ismaili KH. Forecasts based on self-regulated learning in high school students' test anxiety, Master's Thesis Psychology, Islamic Azad University Marvdasht branch. . (1392).(Persian)
2. Amini Z. Learning strategies and motivational beliefs about self-regulation and academic achievement of students, training of new ideas, (1387). 4: 136-123.(Persian)
3. Izadi S , Mohammad Zadeh R. Learning styles, personality traits and academic performance, behavior of preceding studies scholar teaching and learning. (1392) .1(27): 28-15.(Persian)
4. Alborzi SH, Samani S .the only organized, Q. Evaluation and comparison of beliefs and motivational self-regulation strategies for learning among secondary school students from the city center Hvshan sharp. Journal of Humanities and Social Sciences, Shiraz University, (1378). 15(1) .(Persian)
5. Poursharifi H , Mehryar A. Clinical Psychology, Tehran: Further evaluation and assessment. (1382) Tabe Bordbar F. The relationship between personality traits and learning styles with academic achievement online, multimedia magazine (1391). 3(2): 16-10.(Persian)
6. Tabatabai J, Bani Jamali S,Ahadi SH,khamesan A.effect self-regulated learning strategies on academic achievement and anxiety Psychology, Islamic Azad University of Birjand, Birjand University of Medical Sciences Journal of Nursing. (1391) .9(4): 300-292.(Persian)
7. Jafari A. The relationship between personality traits and creativity and happiness of students, master's thesis in General Psychology, Tehran: PNU. (1387).
8. Hosseininasab S, Badri gorgi R,Oskooi isan, Ghaemian. Relationship between personality traits and interpersonal conflict resolution styles adjustment Islamic Azad University, Tabriz Branch, Journal of Educational Research. (1388). 1(2): 78-57.(Persian)
9. Rezai A, Khursha M, Maghami H. The relationship between personality traits, motivational beliefs and learning strategies and academic performance groups Humanities and Science, Journal of Educational Psychology, (1392). 8(26):234-211.(Persian)
10. Seif A. Psychology Training, Tehran: Publication aware. . (1390)
11. Shaebani A,Shafie poor motlagh M. the evaluation of students' knowledge of reading practices, magazines, Information and Library Journal book. (1382). 54: 55-35.(Persian)
12. Saleh sedghpur B,Azimi S. Structural equation modeling (SEM) through the mediation of self-regulation and emotional intelligence on math achievement, Journal of School Psychology, (1393). 3(4): 91-73.(Persian)
13. Samadi M. Investigation on self-regulation and self-regulation strategies HI–Msyh Tasyrfvry and educating Mathematics, Journal of Educational Innovation, (1387). 27: 95-79.(Persian)
14. ATayifar R,Shaghaghi F. The relationship between goal orientation, self-regulated learning and academic achievement in third grade female students, including mathematics, physics and humanities, Journal of Education, (1389). 106: 65-45.(Persian)
15. Kajbaf M, Moulavi H, Shirazi, Ae. The relationship between academic performance of high school students self-regulated learning strategies and motivational beliefs, Taz•h–Hay Journal of Cognitive Science, (1382) .1: 88-65.(Persian)
16. Keshavarz M,Jafari A,Salahshoor M,Vaziri S. The relationship between cognitive styles, and personality and academic achievement (Case Study: Tehran University of Medical Sciences), Faculty of Medical Sciences Journal of Education e\_Heydarieh, (1393) .1(1): 19-11.(persian)
17. Kyamrsi A, Abulghasemi A,Agh A. The Role of metacognitive beliefs on students' test anxiety and academic performance. The findings of cognitive science in education (1390). Mashhad Ferdowsi University.(Persian)
18. Laynvn, Richard A. and Gudashtayn, Leonard di. (1990). Personality assessment, translator Naqshbandi S and colleagues. (1388). Tehran: Publication smoothly.(Persian)
19. Moradi moghadam M. A look at the statistics results of the academic year 82-81. Journal of Education Institute of Education, (1383).NO 73-72 .(Persian)
20. Mirzaiyan B , Hassanzadeh R, Shirdel KH. the relationship between self-regulated learning strategies and achievement motivation and academic performance of high school students in the city of Sari, new ideas in education, (1391).7(4): 87-77.(Persian)

21. Namdarpour F. Examine the relationship between self-regulated learning and academic skills and academic achievement among students of Islamic Azad University of Khomeini Shahr, educational management initiatives, (1387). 4(1): 152-137.(Persian)
22. Ao Man- Chih. The effect of the use of self- regulation learning strategies on college student's performance and satisfaction in physical education, A thesis submitted in partial fulfillment of the requirements of degree doctor of education. (2006).
23. Bembenutty, H. Self-Regulation of Learning and Academic Delay of Gratification: Gender and Ethnic Differences among College Students, *Journal of Advanced Academics*, (2008). 18 (4) , 586-616.
24. Booth-kewley, S., and Vickers, R. R. Associations between major domains of personality and health behavior. *Journal of personality* (1994)., 62, 289-298
25. Ciorbea, L., & Pasarica, F,. The Study of the Relationship between Personality and Academic Performance, [Procedia - Social and Behavioral Sciences](#). (2013). 78(13): 400-404.
26. Costa, P. T., and McCrae, R. R. NEO PI-R professional manual. Odessa, FL: Psychological Assessment Resource. (1992).
27. Dole, C. & Schroeder, GR. The impact of various factors on the personality, job satisfaction and turnover intentions of professional accountants. *J Managerial Auditing*. (2001). 16 (4):234 -245.
28. Garrido-Vargas, M. relationship of self-regulated learning and academic achievement among English language learners, A thesis submitted in partial fulfillment of the requirements of degree doctor of education(2012).
29. Howard, O. J., and Howard, K. J. M. An introduction to Five-Factor model of personality for: Human resource professionals. (1998). Accessed June 7 th, 1999 at [www. Centacs.Com/ quik pt3.htm](http://www.Centacs.Com/quik pt3.htm).
30. Johnson, W., R., Prestopnik, J., L. and Slesnick, N. Predictors of aggression in substance abusing adolescent runaways. Center on alcoholism, substance abuse, and addictions (CASAA), University of New Mexico. (2005).
31. Lonsbury J.W & Loveland J.M & Sandstorm E.D & Gibson L.W , An investigation of personality traits in relation to career satisfaction. university of Tennessee , Knoxville. (2010).
32. Naurayi, MM., & Cherry, AD. Accounting students' performance and personality types. *Journal of education for Business*. (2003). 6:111-115
33. O'Connor, M. C., & Paunonen, S. V. Big five personality predictors of postsecondary academic performance, *Personality and Individual Differences*, (2007). 43, 971–990
34. Peng, C. Self-Regulated Learning Behavior of College Students of Science and Their Academic Achievement, *International Conference on Medical Physics and Biomedical Engineering*. (2012). 33, 1446- 1450.
35. Pintrich, P.R., & De Groot, E.V.,. Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, (1990). 85(1), 33-40.
36. Sevgi, T. & Ozcan, D. the relationship between self-regulated learning skills and achievement: a case from Hacettepe university medical school, *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (H. U. Journal of Education)*. (2010). 38: 279-291.
37. Weinstein, C E, Mayer, R E. The Teaching of Learning Strategies In MC Wittrock (Eds) , *Handbook of Research on teaching*. New York: Macmillan(1986).
38. Westerman, JW, Nowicki MD,. & Plante, D. Fit in the classroom: Predictors of student performance and satisfaction in management education. *Journal of management Education*. (2002). 26(1):5-18.
39. Wolters, C.A. self- regulated learning and college ,students regulation of motivation. *Journal of educational psychology*. (2004). 2. 224-235.
40. Zimmerman, B J. Self-efficacy: an essential motive to learn *Contemp. Educ Psychol*; (2000). 25 (1): 82-91.