

# Study of the Effects of Parenting Styles and Self-Regulation on Academic Achievement

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**ABSTRACT:** the current study aims to study the effect of parenting styles and self-regulation approaches in learning on academic achievement of guidance school children. 261 male students studying in GheireEntefaie junior class were selected in multistage cluster method from 2, 6 and 14 areas of education centers in Tehran. Data were obtained by Parenting Styles and Self-Regulation Approaches Questionnaires and also school transcript. Student's final average of junior high school students was considered as academic achievement. Research data were analyzed using frequency, percentage, chi-square, one-way analysis of variance, Pearson correlation coefficient and multivariate regression. there was a significant relationship between parent's parenting styles and self-regulation approaches and student's academic achievement. The strongest factor to predict student's academic achievement was assertive parenting style and self-regulation approaches are at a later stage of assertive parenting styles. parent's parenting styles and student's self-regulation approaches is very important in their academic achievement.

**Keywords:** parenting style, self-regulation approach, academic achievement

## INTRODUCTION

Study of factors affecting academic achievement during the last three decades has been more paid attention to education professionals. Several research findings have shown that academic achievement is influenced by both knowledge structures and processes of information processing and environmental and self-regulation factors (Buttler and Winne, 1995). In his early studies (1965, cited in Yaghoubkhani, 1993) regarding the analysis of parental behavioral factors, Scheffer is achieved to dimensions: warm relations against cold ones and controlled relations against freedom. Scheffer (1965, cited in Yaghoubkhani, 1993) divided parents into four general categories with a combination of two mentioned dimensions: warm and controlling parents, warm and giving freedom parents, cold and controlling parents and cold and giving freedom parents.

Baumrind's studies (1991 a) is resulted from his children and families. Basics of Baumrind's inference of parenting styles are a typological approach that emphasizes on the combination of different parenting styles and it has been assumed that the effect of each factor in the component depends on the sequence of other factors. Differences in the composition of the main elements of parenting (such as being warm, engaging, maturing requests and supervision) make some changes in how children react to parent's influence. By combining acceptance/responsiveness and demandingness/controlling, Baumrind presented four patterns for parenting styles including:

Authoritative Parenting: they are flexible and demanding parents, control their children and acceptor/respondents, they ordain clear rules, explain the cause and logic of these rules and restrictions, they are responsive to children's attitudes and make them involved in family decisions.

Authoritarian parenting: this is a restrictive parenting method which parents apply a combination of high demandingness/controlling and low acceptance/responsiveness in dealing with children. These types of parents impose any rules and have exact obedience expectation, rarely explain and trust to the power of their thinking as physical punishment to do actions.

Neglectful Parenting: in this method, aspects of acceptance and responsiveness are in a high level but controlling and demandingness is low. This type of parents is tolerant and ordains relatively few rules for

children to have a mature behavior and encourage children to express their feelings and impulsiveness and rarely control their behavior.

**Exclusive Parents:** these types of parents combine low demand/control and acceptance/responsiveness dimensions and do not interfere in training their children. It seems that these parents are involved in their problems in such a way that cannot allocate enough force to establish and implement rules.

With a little careful reflection, it can be realized that there is not much difference between Baumrind's attitudes (1991a,b) and Scheffer's attitudes (1965, cited in Yaghoukhani, 1993).

Results show that parenting style affects children's academic achievement directly and indirectly by interfering in the process of information processing (Welters,1998; Stenberg et al.,1989) children are brought up in the process of self-regulated learning.

Self-regulated learning is the category that deals with an individual role in learning process. This structure was first proposed in 1967 by Bandura (Kadivar,2001). The importance of this structure in learning and academic and occupational, etc. achievement is to the extent that different models have been presented by various experts. Among these models is the one presented by Pintrich (1986). In this model, "self-regulation in learning" deals with optimum use of cognitive-metacognitive and managerial strategies. Cognitive strategies (Pintrich,1986) refers any behavior, thought or action that aims to help learn, organize and store knowledge, skills and facilitate utilizing them in the future (Winestine and Hume,1998, cited in Seyf,2000).

Metacognitive approaches are monitoring (Pintrich,1986) and are used to monitor cognitive approaches and guiding them. These strategies can be divided into three categories: 1-planning strategies, 2-controlling and monitoring approaches and 3-ordering strategies. Approaches for resource management are facilitative strategies (Pintrich,1986) and is mainly used by learners to control and regulate the environment such as time management, how to effort and select the area of study and also get help from other people such as teachers, peers, resources, etc. (Zimmerman andMartinez-pons,1986).

Research findings in this field indicate that children of parentswho explain their expectation to their children and male them involved in the methods and reasons of goal setting, planning, monitoring, evaluation and getting help of others and they are in higher order compared to their peers in self-regulation (Walters,1998; Zimmerman and Martins-Pons,1986) and in a higher rate of academic achievement (Schunk,2000; Rizenburg and Zimmerman,1991, cited in Walters,1998; Wilson,1997;Bouffard- Bouchard et al.,1993;Darpwizeh,2005;Fathi. Ashtiani and Hassani,2000)

Although there have been studies on the relationship between parenting style and student's academic self-regulation, no study has been performed to investigate the relationship between these three variables to each other at the same time. Hence the present study is performed to investigate the relationship between these three variables and to answer the two questions below to specify whether there is a relationship between parent's parenting style, academic self-regulation and academic achievement or not which components of parenting style and self-regulative approaches are better predictors for academic achievement.

## METHOD

This study is a cross-sectional study with correlation method. The subjects in the present study contain 261 junior guidance school students of public schools of Tehran with average age of 13 years and 11 months and 9 months standard deviation. The samples were selected in multistage cluster sampling. Three seemingly different areas were first purposefully selected in terms of cultural, social and economic aspects (areas 2, 6 & 14). Then the areas selected for education, guidance schools and male Gheir-e Entefaie schools were found with the cooperation of instruction unit. Then the experts of training unit in guidance school who have deep and detailed information about the area schools are requested to specify the schools which are known to ordinary schools among the above schools (male Gheir-e Entefaie guidance school) and give over to research experts or colleagues. One school is then randomly selected among the list separately provided for each area. Because the selected schools were shifts, one shift was randomly selected and all junior guidance school students in this shift were studied.

Number of junior high school students of selected schools of 2,6 and 14 areas was 88, 80 and 93 ones, respectively. Third grade guidance school is selected due to the fact that these students are more able in describing the parent's parenting style than other ones for developmental process.

### ***Tools for measuring variables***

**Parental Educational Method Questionnaire:** the questionnaire developed by Naghashian (2006) in this regard based on Scheffer's works (cited in Yaghoukhani,1993) in Shiraz was used. In this questionnaire, various dimensions of control-freedom and coldness-warmth of family relations are evaluated. According to Scheffer (cited in Yaghoukhani,1993), each emotion and control dimension contains various concepts such as excessive freedom, moderate discipline, excessive interference, concealing aggression, control through

feeling guilt, direction, continuous uniform discipline, expecting mature behaviors, punishment, emotional support, affirm and expressing positive opinion, participating in affairs, expressing affection, communication, expressing a negative opinion, anger, rejection and ignoring the child. The above-mentioned questionnaire contains 77 questions and each questions ranged totally agree, agree, neutral, disagree and totally disagree. The expressions are mentioned as positive and negative in the questionnaire. Each expression is assigned 1-5 scores.

For positive statements, score five for totally agree and score 1 is given for totally disagree and the scoring criteria is inverse for reverse statements. Each person can gain minimum 42 and maximum 210 scores in control dimension. Each person can gain minimum 35 and maximum 175 scores in affection dimension.

The questionnaire is constructed in such a way that the overall perception of subjects out of the public environment dominating family is assessed and there is no place to discuss specific behaviors of each parent.

According to the report delivered by Naghashain (2006), reliability coefficient of the questionnaire is 87%. Yaghoukhani (1993) calculated the questionnaire reliability through Cronbach's aloha coefficient which was reported 73% and 74% for control-freedom dimension and 82% and 83% for warmth-coldness dimension. In the current study, questionnaire's reliability was calculated through Cronbach's alpha coefficient and retest method which was obtained 7% and 72% for control-freedom dimension and 80% and 78% for coldness-warmth dimension.

Self – Regulation in Learning Questionnaire: Zimmerman and Martins-Pons (1986) specified 14 self-regulation approaches in learning through interviews with 80 guidance school students and accordingly developed 15 options for this questionnaire. Students are requested in this questionnaire to grade rate of using 14-fold approaches in the regarded field from 1 to 4. In this scale, 1 represents very small, 2 equals small, 3 sometimes and 4 more often times. Moreover, one question is added up which though does not directly refer an approach; it makes possible the student's creative response for a creative method of the cases mentioned above. This scale has maximum 60 scores and is known to SPLIS form. Zimmerman and Martins-Pons (1986,1988) investigated the criterion reliability and convergent reliability of this tool and reported it in a desirable level. To verify formal validity, this questionnaire was provided to some specialists by Mahmoudi (1998) which was confirmed. In order to investigate student's self-regulation reliability test, their correlation coefficient among subjects' scores in the preliminary study and their average in second grade guidance school tests and also their English and Mathematic courses in the second year were calculated. This coefficient for average was 38%, for mathematics 34% and English course 3% which was significant in all three levels. Mahmoudi (1998) achieved the retest reliability of this tool sin a 30 people group of subjects 68% and test internal consistency with Cronbach's alpha method 56%. Samadi (2004) achieved test reliability through internal consistency (Cronbach's alpha) 61%. In the current study, test reliability in retest method of a 30 people group 65% and through internal consistency 62% has been calculated.

Student's academic achievement was evaluated by referring to their workbook and extracting their total average scores in the third year.

Part of sample demographic information such as age, social-economic and cultural status of families were collected by studying the student's characteristic forms while completed through interviews with their parents and information related to school's educational status including work experience of junior guidance school teachers through the study of personnel rules.

Parent's parental dimension of the questionnaire to samples is presented and the aim of parent's parenting aspects was explained to them orally. Then they were asked to express their conceptions out of their parent's behavior by giving detailed answers to questionnaire's questions. One month later. Self-regulation approaches questionnaire was given to subjects some explanations were provided to them by the method of completing the questionnaire and they were asked to carefully respond to the questionnaire's questions. Information related to academic achievement and teacher's academic records as well as student's economic and social features at the end of the school year.

### **Findings**

Some of the features of sample's demographic characteristics are given in Table 1. As specified in Table 1, 261 people were participated in this study, among this 34% were from area 3, 30% area 7 and 36% were from area 19 of Tehran city. Parental economic-social status including father's education level, mother's education level and father's job as well as teacher's working experience in schools of three areas mentioned above was not significantly different.

To investigate the relationship between parental parenting styles and self-regulation approaches and student's academic achievement, Pearson's correlation coefficient was used and to predict academic achievement using parent's parenting styles and student's self-regulation approaches, multivariate regression method was used which its results are given in Tables 2 and 3.

Table 2 shows correlation coefficient for all variables together. Among the parental parenting styles, assertive parenting style with academic achievement had a high correlation. Other parenting styles with academic achievement had negative correlation and some of them were in a significant level of  $P < 0.001$  and

some of them were significant in  $P < 0.001$  and some were not significant. Relationship among three components of self-regulation approaches variables including cognitive, metacognitive and managerial variables was positive with academic achievement and was mainly significant at  $P < 0.001$  level. In addition, the relationship between cognitive, metacognitive and managerial variables with parental assertive parenting style was positive and significant at  $P < 0.001$ . Moreover, the relationship between self-regulated approaches, i.e. cognitive, metacognitive and managerial approaches was positive and significant at  $P < 0.001$  level.

To become aware of the impact of parental parenting style and self-regulated approaches on academic achievement, stepwise multiple regression analysis method was used. In this way, variables that has a significant relationship with academic achievement according to Table 2 are involved in the equation and their effects were determined which their results are given in table 3.

As shown in Tables 2 and 3, variables of assertive parenting style, cognitive and metacognitive and managerial approaches are the variables that predict academic achievement.

Among the above-mentioned variables, assertive parenting style was the strongest predictor of academic achievement. This variable is by itself indicates 46% variance of academic achievement scores.

The second variable entered the analysis was cognitive approach. The insertion of this variable to the analysis increased determination coefficient to 6% and variables of parental assertive parenting style and cognitive approach totally explained 52% of academic achievement variance.

Table1. Some of the Sample Demographic Characteristics (N=261)

Variables	Area 2 Frequency(percent)	Area 6 Frequency(percent)	Area 14 Frequency(percent)
Educational level of Father			
Under Diploma	1(4)	1(4)	12(5)
Diploma & upper MA	63(24)	57(21)	7(27)
BA	1(4)	5(2)	6(2)
MA & upper MA	5(2)	8(3)	5(2)
Educational level of Mother			
Under Diploma	13(5)	11(4)	11(4)
Diploma & upper MA	68(26)	62(23)	72(28)
BA	2(1)	3(1/5)	8(3)
MA & upper Ma	5(2)	4(1/5)	2(1)
Father Job			
Tradesman	25(10)	2(7/5)	25(10)
Employee	6(23)	56(21)	67(26)
Merchant	3(1)	4(1/5)	1(4)
Teachers work experience	11/58(2/97)	13(2/2)	12(3/45)

Table2. Correlation Coefficient Matrix of the Variables under Study (N=261)

Variables	Achievement	Assertive Parenting Style	Arbitrary Approach	Landscape Approach	Therejection approach	Cognitive Approach	Metacognitive Approach	Managerial Approach
Assertive Parenting Style	0/681	1						
Arbitrary Approach	-0/32	-0/8	1					
Landscape Approach	0/42	-0/25	0/39	1				
Therejection approach	-0/39	0/08	0/1	0/09	1			
Cognitive Approach	0/62	0/49	-0/3	0/2	0/54	1		
Metacognitive Approach	0/52	0/49	-0/29	-0/3	0/2	0/54	1	
Managerial Approach	0/4	0/45	-0/28	-0/26	-0/2	0/54	0/53	1

Table3. Descriptive Statistics of Regression Model to Predict Academic Achievement through Parental Parenting Style Variables and Self-Regulated Approaches

Stage	Variables	R <sup>2</sup>	F	Sig	Beta	t	Sig
1	Assertive Parenting Style	0/463	404/13	0/001	0/352	31/74	0/0001
2	Cognitive Approach	0/525	396/68	0/001	0/342	32/09	0/0001
3	Metacognitive Approach	0/602	370/78	0/001	0/255	26/75	0/0001
4	Managerial Approach	0/676	311/98	0/0001	0/238	22/64	0/0001

The third variable in terms of the power to predict academic achievement was metacognitive approaches. The insertion of this variable to the analysis increased rate of determination coefficient up to 8% and parental assertive parenting styles, cognitive and metacognitive approaches totally explain 60% of academic achievement variance.

The fourth variable entered the analysis is managerial approach that its insertion cause increased prediction power of academic achievement up to 4.7%. Assertive parenting style, cognitive approach, metacognitive approach and managerial approach explained totally 67% of academic achievement variance.

## CONCLUSION

Analysis of research data indicates that among the parental parenting style, assertive and self-regulated approaches in learning (including cognitive, metacognitive and managerial approaches) have significant positive correlation with academic achievement. In contrast, other parenting variables (including authoritarian, negligent and exclusive practices) have negative correlation with academic achievement variables and self-regulated approaches in learning. This finding is compatible with the claims made by Welters (1998), Martins-Pons (1996) and Derowzeh (2005). Welters (1988) maintained that parental parenting style has an impact on children's self-regulated behaviors; that is to say, balanced and proportionate behavioral methods with children cause their self-regulation; on the contrary, imbalanced and inappropriate behavioral practices makes them unbridled and dependent.

According to Martins and Pons (1996), children are taught how to determine their purpose, planning, monitoring and their performance control through observing their parent's performance. Derowzeh (2005) found in his study that parental amicable relationship, particularly mother, has the ability to predict self-regulation skills.

Among the reasons that are put forward to explain these findings is that parental emotional interaction with children has a significant impact on children's self-regulation skills and because parents are the first children's tutors and they are highly influenced by their parents being their first models in early childhood, parents can make maximum use of education through taking appropriate parenting measures in dealing with children. According to Eisenberg and Losova(1997), appropriate parenting method is the one using a balanced combination of acceptance and control in dealing with children of families with the use of short-term training sessions by the parents, makes families involved in their parenting mission and help their parents deal constructively with their children.

Findings of this study indicate that parent's assertive parenting practices is the strongest predictor for academic achievement. In other words, children whose parents apply moderate combination of acceptance and control in dealing with their children have a high rate of academic achievement.

This finding is compatible with the one obtained by Eisenberg and Lowsoya (1997) and Derowizeh (2005) who found in their studies that parent's amicable relationship, especially mother, able to predict academic achievement. To explain this finding, it can be said that parents make their children aware of this reality through applying a balanced combination of acceptance and control that why, where and how they should use their knowledge and skills.

Another finding obtained in this study was that after assertive parenting practice, one of the most reliable indicators of academic achievement is self-regulated approaches. Analyzing these results showed that this variable can significantly predict academic performance. This finding is compatible with the one obtained by Wilson (1997), Bouffard-Bouchard et al. (1993), Derowizeh (2005), FathiAshtiani and Hassani (2000) that students most make use of self-regulated approaches no matter which course they studied in high school. To explain this finding, researchers indicated that self-regulation approaches make students be active in a metacognitive, motivational and behavioral method in managing their thought and learning and control their learning. Due to a strong and tenacious relationship between self-regulated approaches and academic achievement, it is suggested that education system make learner's self-regulation as a macro policy in learning process.

Hence, educational system policymakers need to make teachers aware of the role, importance, reason and the way they can use these strategies in the field of teacher manpower during the education courses. In the light of making teachers self-regulated in the process of education, it can be hopeful to making students self-regulated and finally promoting and improving their academic performance.

Because these findings are achieved out of the study of junior girl students of public ordinary schools of districts 2, 6 and 14 of Tehran city and it was not possible to apply Parenting Style Questionnaire for parents, these findings may not be identical in the context of region, city, class, age, gender, social class, etc. In addition, results obtained in correlation method compared to experimental and semi-experimental methods are less assertive. It is hence necessary to be cautious in the explanation, interpretation and generalization of these findings.

Moreover, due to the fact that in addition to the variables involved in this study, there are other variables in student's academic achievement including motivational variables, teaching practices and classroom structure, it is therefore recommended that in order to more generalize finding in future studies, the effect of each variable be more studied with a more assertive methods and more advanced processing.

## REFERENCES

- Baumrind D. 1991 b. Effective parenting during the early adolescent transition. In P. E. Cowan & E. M. Hetherington (Eds). *Advances in family research*. 2: 111-163.
- Baumrind D. 1991 a. The influences of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*. 11: 56-95.
- Bouffard- bouchard T, Parent S, Larivee S. 1993. Self- regulation on a concept- formation task among average and gifted students. *Journal of Experimental Child Psychology*. 56(1): 115-134.
- Buttler D, Winne P. 1995. Feedback and self- regulate learning : A theoretical synthesis. *Review of Educational Research*. 65: 245-181.
- Dariwozoh Z. 2005. Study of the amicable relationship among high school girl students with their mothers and their relationship with cognitive skills and academic achievement in Tehran city. *Journal of Women studies*. 8: 68-72.
- Eisenberg N, Losoya S. 1997. Emotional responding Regulation, social correlates & socialization. In P. Salovey & D. J. Stuyterd (Eds.), *Emotional development and emotional intelligence*. pp.129-162. New York: Basic books.
- FathiAshtiani A, Hassai M. 2000. comparison of learning approaches in successful and non-successful students. *Journal of Psychology*. 4: 4-15.
- Kadivar P. 2001. study of the contribution of self-efficacy, self-regulation, intelligence and student's academic achievement for presenting a pattern for optimal learning, Education Faculty, Tehran.
- Mahmoudi Z. 1998. study of the relationship between self-imagination-self-regulated learning and girl student's academic achievement of Shahrar pre-province second grade guidance school, MA thesis, Training Teacher University.
- Martinez – Pons M. 1996. Test of a model of parental inducement of academic self regulation. *The Journal of Experimental Education*. 64(3): 213-227.
- Naghashain M. 1959. relationship between family environment and academic achievement, MA thesis, Shiraz University.
- Pintrich PR. 1986. Motivation and learning strategies interactions with achievement *Developmental Review*. 6 : 25-56
- Samadi M. 2004. study of students and parent's learning self-regulation: study of sexuality and academic performance. *Journal of Psychology and Educational Sciences*. 34(1): 157-175.
- Schunk DH. 2000. *Learning theories: An educational perspective*. Prentice Hall. Merrill.
- Seyf A. 2000. *Educational psychology*, Agah Publications, Tehran.
- Steinberg L, Elman J, mounts N. 1989. Authoritative parenting psychological maturity and academic success among adolescents. *Child Development*. 60: 1424-1430.
- Wilson J. 1997. Self – regulated learners and distance education theory. Retrieved on from <http://www.usask.ca/education/coursework/802papers/Wilson.html>.
- Wolters C. 1998. Self- regulated learners and college, Students regulation of motivation. *Journal of Educational Psychology*. 2: 224-235.
- Yaghoobkhani Ghasewand M. 1992. relationship between family environment and academic achievement, MA thesis, Shiraz University.
- Zimmerman BJ, Martinez – Pons M. 1986. Development of a structural interview for assessing student use of self- regulated learning strategies. *American Educational Research*. 23: 614-628.
- Zimmerman BJ, Martinez – Pons M. 1988. Construct validation of a strategy model of student self-regulated learning. *Journal of Educational Psychology*. 11: 314-332.