

Academic Engagement as a Mediator in Relationship between Parenting Style and Academic Achievement among Adolescents in Sirjan-Iran

Elham Dehyadegary¹, Kouros Divsalar², Nooshin Sabour Esmaeili³, Azimeh Jafari Sadr⁴, Fatemeh Askari⁵

1. Department of Psychology, Science and Research Branch, Islamic Azad University, Sirjan, Iran.

2. Neuroscience Research Center, Kerman University of Medical Sciences, Kerman, Iran.

3. University Putra Malaysia, Faculty of Human Ecology.

4. Department of Psychology, Al-Zahra University, Tehran, Iran.

5. Department of Psychology, Shiraz University, Shiraz, Iran.

***Corresponding author:** Kouros Divsalar, Neuroscience Research Center, Kerman University of Medical Sciences, Kerman, Iran.

Address: Postal Code: 7619813159, Neuroscience Research Center, Kerman University of Medical Sciences, EbneSina Street, Jahad Blvd. Tel: 0341-2264180, Fax: 0341-2264198, Email: Kouros_Divsalar@yahoo.com

Abstract: The major purposes of the presents study were (a) to examine the degree to which academic engagement mediates the relationship between parenting style and academic achievement. Data from 382 participants (191 males and 191 females) were examined using measures of parenting style, academic engagement, and self-reported grade point average. The results indicated that academic engagement mediate relationship between parenting style an academic achievement. Implications for future research are discussed.

[Elham Dehyadegary, Kouros Divsalar, Nooshin Sabour Esmaeili, Azimeh Jafari Sadr, Fatemeh Askari. **Academic Engagement as a Mediator in Relationship between Parenting Style and Academic Achievement among Adolescents in Sirjan-Iran.** *Life Sci J* 2012;9(4):5715-5727] (ISSN:1097-8135). <http://www.lifesciencesite.com>.851

Keywords: Parenting Style, Academic Engagement, Academic Achievement

1. Introduction

The issue of academic performance among Iran continues to be a matter of great concern for many scholars, researchers, and educators (Fouladi, 2007). Many researchers focus on what has been called the achievement gap (Fathi, 2006), with the general focus on understanding the factors that contribute to differential academic outcomes. In recent years, countries such as Canada, has noted an increase in children with risk factors that may compromise their present achievement and future success, and approximately 27.6% or 1 in 4 students is considered to be at risk for school failure (Jordan, 2006). Also, across the 21.9 million adults in California, 2.19 million males and 1.96 million females (20% of the students) were dropouts (Belfield, 2007). In Iran, a study by Ghasemi (2010) found that

22% of the students in Iran suffer from low academic achievement due to family problems and personal factors.

Halawah (2006) argues that academic achievement has been linked to several influences distinctive to the home environment, such as parenting style and parental involvement. It is generally agreed that parenting is a thankless task and parental responsibility begins from the day the child is born. Parenting is made even harder by the fact that all parents would like to succeed in bringing up their child. The task of parenting is one of the important variables widely investigated in the field of human development (Baldwin, McIntyre, & Hardaway, 2007). It has been shown that there is a relationship between the way parents bring up their children and adolescents and academic performance. Baumrind's theory

(1971) proposed three styles of parenting that were qualitative in nature: permissive, authoritarian, and authoritative. Parents who are permissive neither exercise control over nor make demands of their children in respect of the way they behave. Although such parents are relatively warm toward their children, their children usually end up not performing well academically (Roche, Ensminger & Cherlin, 2007). In contrast, authoritarian parents who are strict, do not encourage interpersonal dialogue, exercise absolute control over their children's behavior according to a rigid set of standards and demand complete obedience, and in the process do not show much warmth toward their children. As a result, children of authoritarian parents often show poor academic performance (Attaway & Bry, 2004). Parents with an authoritative parenting style make the effort to guide their children by rationalizing their actions, encourage interpersonal communication, and at the same time put their children at ease by being warm toward them. According to Park & Bauer (2002), by using reasoning and emotionally supportive approach, parents help their children to exhibit sound moral reasoning, empathy and self-confidence, which are closely associated with high academic performance.

Parenting Style Theory

Bumrind states that the parenting styles (i.e., authoritative, authoritarian, and permissive) contributes to child behaviour differently. Authoritative parents who are characterized by effectiveness and are supportive of their child, encourage their children to do well academically and explain the need for education in order to become a successful adult. Thus, the child under the authoritative style of parenting performs well in school-related activities and achieves are overall well-being. The authoritative parents also recognize when their child is improving or learning new material and show satisfaction when it is done through hard work. Additionally, these parents are not angered by their children's mistakes; instead they want the children to know that mistakes are part of the learning experience (Baumrind, 1971).

Authoritarian parents are characterized by a strict and rigid disciplinary approach and expect obedience without question. These characteristics negatively affect the child's academic achievement. Stress and anxiety in children may experience higher if their authoritarian parents are involved in their academic activities.

Permissive parents, who allow their children to regulate their own activities, exert no control and rarely use punishment in children's upbringings. Permissiveness style negatively impact children's academic involvement, resulting in their low academic achievement. These parents may not ever visit the school or the classrooms of their children or speak with a school adult involved with their children's educational experience (Baumrind, 1971). It is concluded that various types parenting style will influence academic achievement of adolescents differently.

In light of this, the Baumrind's parenting style theory supports the relationship between parenting style and academic achievement in present study. Academic engagement is individual factor that plays a significant role in students' academic achievement (Ogbu & Davis, 2003; Stewart, 2007). Such engagement can be described as the level of commitment and involvement or the amount of time, energy and effort that students put into their educational learning activities (Greene et al., 2004; Stewart, 2007). Research studies (Carbonaro, 2005; Johnson, Crosnoe, & Elder, 2001; Stewart, 2007; Sirin, 2005; Flowers & Flowers, 2008; Wang & Holcombe, 2010) show that an adolescent student's engagement in academic activities has a significant effect on academic achievement. Students with higher academic engagement, tend to have higher academic performance.

In the present study, involvement in school activities is seen as a mediating construct that connects parenting style with the academic achievement of their children. This belief is supported by a small but steadily growing body of research. For instance, Hedvat (2008) expected and found that children's school engagement mediated the effect of the parental school involvement on adolescent's academic achievement. However, there is still a lack of

evidence to support the assumption that school engagement has a mediating impact on factors like parenting style or peer and school variables as well as personal characteristics. Therefore, the present study also examined the mediate effect of academic engagement on the relationship between parenting style and academic achievement.

2. Objectives

1. To describe the parenting style, academic engagement, and academic achievement of the respondents.
2. To determine the relationships between parenting style, academic engagement and academic achievement of the respondents.
3. To determine the mediating effect of academic engagement on the relationship between parenting style and academic achievement.

3. Method

Research design

This study used a descriptive and correlational research design to examine the relationships between parenting style, academic engagement and academic achievement. Also, it is a cross-sectional study which involves collecting data over a short period of time in order to search for the answer for the outlined research questions.

Population and Sample

The study population in this research is high school students from two districts in Sirjan. The total number of students in two districts is 3,500, with 1,640 (47%) of the population in south district high schools and 1,860 (53%) in north district high schools (Ministry of Sirjan Education, 2010). Table 3.2, shows that the number of student's aged 15-16 years old in two districts is 1,738 while the number of students aged 17-18 years old in two districts is 1,762. Based on Krejcie and Morgan Table (1970), the number of respondents required to represent the population of the present study is 382 by the proportional stratified random sampling technique was used to choose a representative sample from the target population.

4. Measures

Parenting Style

Parenting style was measured by Parental Authority Questionnaire (PAQ: Buri, 1991). PAQ is valid and reliable instruments. PAQ consists of 30 items with three subscales which are permissive, authoritarian, and authoritative parental authority types. There are 10 items for each subscale. Examples of items included in the Parental Authority Questionnaire are as follows:

1. As I was growing up, once family policy had been established, my mother/father discussed the reasoning behind the policy with the children in the family(Authoritative Style).

1. Whenever my mother/ father told me to do something as I was growing up, she/he expected me to do it immediately without asking any questions (Authoritarian Styles)

1. As I was growing up my mother/father did not feel that I needed to obey rules and regulations of behavior simply because someone in authority had established them (Permissive Style)

Parental Authority Questionnaire is rated on five point Likert scale ranging from 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree and 5= strongly agree. For each subscale, the score was obtained by summing the score for individual items. Score on each subscale ranged from 10 to 50. High score means high parenting in specific subscale of PAQ.

Buri (1991) reported high reliability for PAQ with Cronbach coefficient alpha values with a range from 0.78 to 0.86 for the mother's parenting style and 0.74 to 0.87 for the father's parenting style. In this study, the subscales within the Parental Authority Questionnaire showed varying degrees of internal consistency ranging from .70 to .76 in a pilot study and .78 to .82 in actual study .PAQ has been tested by Esfandiary (1995) to determine its reliability and validity among Iranian samples. It yielded respectable test-retest reliability.

Academic Engagement

Academic engagement was measured using Academic Engagement Scale (AES) by Short, Fleming, Guiling, and Roper (2002). The AES was developed by Short, Vowels, and Robinson (2002). The AES has 40 items with three subscales. The subscales are cognitive

engagement (10 items), behavioral engagement (15 items), and affective engagement (15 items). A five-point Likert scale from 1= never, 2= seldom, 3= sometimes, 4= often and 5= always was used to rate the items. The score for AES was obtained by summing up the scores for the 40 items after reversing 11 items (items 7, 8, 12, 14, 15, 18, 19, 20, 26, 29 and 34). The total scale score ranged from 40 to 200, with high score indicating high academic engagement among respondents. The AES has demonstrated respectable psychometric properties ($\alpha = .94$). In the current study, alpha reliability for the scale was .87.

Academic Achievement

Respondent's academic achievement was measured by using cumulative grade point average (CGPA) obtained by students' in the academic year of 2009-2010. According to the rules of the Ministry of Education in Iran, the range of academic achievement (GPA) is from 0 to 20, which can be categorized into four levels: fail (scores of 0-9), weak (scores of 10-14.99), moderate (scores of 15-16.99), and excellent (scores of 17-20). In the present study, the cumulative grade point average (CGPA) was utilized in differently. High scores mean high academic achievement.

5. Data Analysis

Data from the present study were processed and analyzed using Statistical Package for Social Science (SPSS) version 16. Three statistical procedures i.e. exploratory data analysis, descriptive analysis, and inferential statistical analysis were utilized for the data analyses. Descriptive statistics such as mean score, standard deviation, percentage and frequency distribution were used to describe the demographic profiles of the respondents. Inferential statistics that was used in the data analysis were Pearson Correlation Analysis, and Hierarchical Multiple Regression analysis.

6. Results

Descriptive findings

Respondents in this study were high school students in Sirjan, Iran. As shown in Table 1, there were equal number of male (50%) and female (50%) students who were involved as respondents of the study. The mean age of the respondents was 16.50 years ($SD = 1.11$). As shown in Table 1, majority (75.4%) of the respondents reported that their parents were authoritative. The remaining respondents perceived their parents authoritarian (13.6%) and permissive (11.0%). Also, more than half of the respondents have high engagement in school activity and homework (57.1%) and high academic achievement (62.5%).

Table 1: Gender, Age, and Levels of Variables

Variables	n	%	Variables	n	%
Gender (N=382)			Parenting Style		
Female	191	50	<i>Authoritative Parenting Style</i>	288	75.4
Male	191	50	<i>Authoritarian Parenting Style</i>	52	13.6
Age			<i>Permissive Parenting Style</i>	42	11
15 Years	95	24.9	Academic Engagement		
16 Years	96	25.1	<i>Low</i>	164	42.9
17 Years	96	25.1	<i>High</i>	218	57.1
18 Years	95	24.9	Academic Achievement		
Mean	16.50		<i>Low</i>	143	37.5
S.D	1.11		<i>High</i>	239	62.5
Minimum	15				
Maximum	18				

Bivariate Analysis

The Pearson correlation analysis was conducted to examine the relationships between parenting style, academic engagement and academic achievement.

Relationship between parenting style and academic achievement

Pearson correlation test was conducted to examine the relationship between authoritative parenting style and academic achievement. As shown in Table 2, there was a weak positive and significant relationship between authoritative maternal style and academic achievement ($r=.25$, $p<.01$). The positive correlation coefficient indicated that an increase in the score for authoritative parenting style is followed by an increase in the adolescents' academic achievement. Adolescents with authoritative parenting were more likely to perform better in academic aspects. Also, there was a negative correlation between parenting authoritarian style and academic achievement ($r=-.037$, $p>.05$). This means that parents who are highly authoritarian, have adolescents children with lower academic achievement. However, the relationship was not statistically significant.

In other hand, there was a negative significant correlation between permissive parenting style and academic achievement ($r=-.16$, $p<.01$). This means that parents who are highly permissive, have adolescents children with lower academic achievement. The strength of correlation between maternal permissiveness and academic achievement is weak.

Relationship between parenting style and academic engagement

As shown in Table 2, there was a weak positive significant relationship between authoritative parenting style and academic engagement ($r=.35$, $p<.01$). The positive correlation coefficient indicates that an increase in the score for authoritative parenting style is followed by an increase in the adolescents' academic engagement. Adolescents with authoritative mothers were more likely to report higher engagement in academic activities. Also, there was a negative correlation between authoritarian parental style and academic engagement ($r=-.053$, $p>.01$). This means that parents who were highly authoritarian, have adolescents children with lower academic engagement. However, the relationship was not statistically significant. In the other hand, there was a negative significant correlation between permissive parenting style and academic engagement ($r=-.17$, $p<.01$). Even though the strength of correlation is weak, the result indicates that parents, who were highly permissive, had adolescent's children with lower academic engagement.

Relationship between academic engagement and academic achievement

As shown in Table 2, the result of the present study show that there was a significant positive relationship between academic engagement and academic achievement of adolescents ($r=.69$, $p<.01$). This means that respondents who were highly engaged in school activities, reported higher academic achievement. The strength of correlation between academic engagement and academic achievement is strong.

Table 2: Correlation analysis

	Variables	X1	X2	X3	X4	Y
X1	Authoritative Parenting Style	1				
X2	Authoritarian Parenting Style	-.256**	1			
X3	Permissive Parenting Style	.248**	.243**	1		
X4	Academic Engagement	.355**	.053	.174**	1	
Y	Academic Achievement	.251**	-.037	.162**	.69**	1

Mediation Analysis

A series of Multiple Regression analyses were conducted to explore the mediating effect of academic engagement on the relationships between parenting style with academic achievement. The mediation test examines the indirect effect of predictor (X) on the outcome (Y) variable through mediator variable (Z). The present study follows the guideline proposed by Baron and Kenny (1986) to test the mediation effect of a mediator on the relationship between the independent and dependent variables. According to Baron and Kenny (1986), there are four steps in establishing mediation:

Step 1: There must be a significant relationship between the predictor and the outcome variable.

Step 2: The relationship between the predictor and the hypothesized mediator is significant.

Step 3: The hypothesized mediator is significantly related to the outcome variable when both the IV and the mediator are treated as predictors and DV as the outcome variable.

Step 4: When the assumptions at step 1 to 3 are fulfilled, the mediation test is conducted (step 4). The IV and mediator are treated as predictors and DV as the outcome variable. To establish that the mediator variable completely mediates the relationship between IV and DV, the unstandardized coefficient (path c') should be zero.

At step 4, if there is a mediation effect, the strength of relationship between the predictor and the outcome is reduced after controlling for the effect of the mediator. Figure 1 shows the mediation model of the relationship between the independent variables and the outcome variable. Path a indicates the relationship between the independent variable and the mediator. Path b refers to the relationship between the mediator and the outcome variable. Path c' indicates the relationship between the independent variable and the outcome variable after controlling for the mediator. According to Baron and Kenney (1986), it is preferable to used unstandardized coefficients in mediating analyses. This is supported by Dugerd, Todman, and Strains (2010).

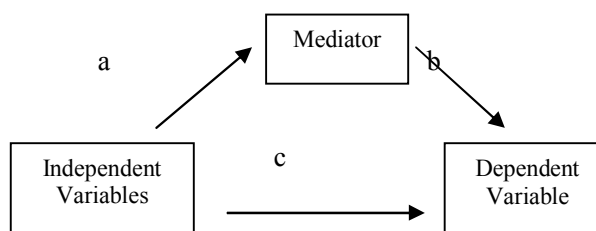


Figure 1: Mediation Model (Center)

When the results shown are consistent with the mediation model (partial or complete mediation), Sobel test was conducted to confirm the significant effect of the mediation. Partial mediation means that path b (relationship between the mediator and the outcome variable) is significant after controlling for independent variable; and path c' is still significant. Complete mediation means that the measured effect in path c' (relationship between independent and the dependent variable after fixing the mediator variable) is zero or at least non-significant (Dugerd, Todman, & Strains, 2010).

Academic engagement mediate relationship between authoritative parenting style and academic achievement

As shown in Table 3, there was a direct significant effect of authoritative maternal style on academic achievement ($B=.090$, $SE=.018$, $t= 5.047$, $p<.05$) and academic engagement ($B= 1.506$, $SE=.203$, $t=7.413$, $p<.05$). The relationship between academic engagement (mediator) and academic achievement was also significant ($B=.059$, $SE=.003$, $t=19.053$, $p<.05$).

Based on the fourth regression step (see Table 3 and Figure 2), the results support the complete mediation model. The relationship between authoritative maternal style and academic achievement after fixing academic engagement is approaching zero and non-significant ($Beta=.001$, $SE=.014$, $p>.05$). The amount of mediation was obtained by deducting the regression coefficient (authoritative Maternal style → Academic achievement) in the fourth regression (when academic engagement controlled) from the regression coefficient (Maternal authoritative

style → Academic achievement) in the first regression (with academic engagement not controlled). The reduction in the maternal authoritative → academic achievement when academic engagement was controlled was $0.090 - 0.001 = .089$. The mediation effect was tested by application of the Sobel test (Baron & Kenny, 1986) to the unstandardized coefficient and standard error values for maternal authoritative style → academic

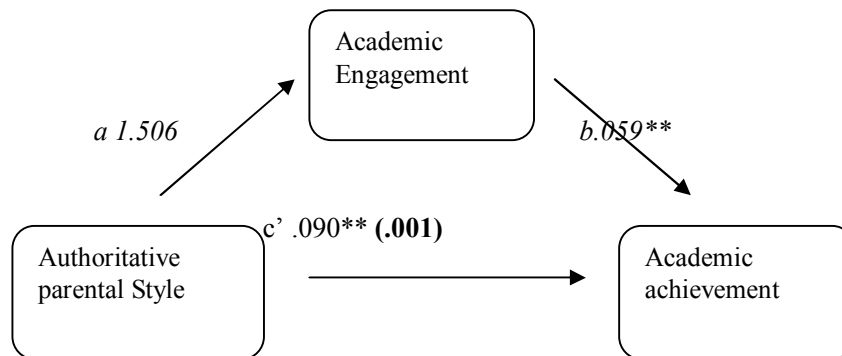
engagement (2nd regression) and academic engagement → academic achievement when maternal authoritative style is controlled (forth regression). This yielded a value of $Z = 6.9170$, $p < .05$, so it was confirmed that academic engagement significantly mediates the relationship between maternal authoritative style and academic achievement.

Table 3: Relationship between maternal Authoritative Style and Adolescents' Academic Achievement Mediated by Academic Engagement

Step	I V	DV	B	SE	Beta	t
1	Parental Authoritative .S	Academic Achievement	.090**	.018	.251	5.047
2	Parental Authoritative .S	Academic Engagement	1.506**	.203	.355	7.413
3	Academic Engagement	Academic Achievement	.059**	.003	.699	19.053
4	Parental Authoritative .S	Academic Achievement	.001	.014	.003	.064
	Academic Engagement		.059**	.003	.698	17.763

Note: B= Unstandardized coefficient; Beta= Standardized coefficient

** $p < .05$



Note: ** $p < .05$

Figure 2: Mediation model

Academic engagement mediate relationship between authoritarian parenting style and academic achievement

The results of the analysis showed that there was no significant relationship between authoritarian parenting style with academic achievement and academic engagement. Therefore mediation analysis was not performed. The results implied that academic engagement does not mediate the relationship between authoritarian parenting style and academic achievement among adolescents.

Academic engagement mediate relationship between permissive parenting style and academic achievement

Table 4 shows that there was a direct significant effect of permissive parenting style on academic achievement ($B = -.059$, $SE = .018$, $t = -3.196$, $p < .05$) and academic engagement ($B = -.747$, $SE = .217$, $t = -3.437$, $p < .05$). The relationship between academic engagement (mediator) and academic achievement was

also significant ($B = .059$, $SE = .003$, $t = 19.053$, $p < .05$). The results of multiple regression analysis at Step 4 ($Beta = -.015$, $SE = .014$) supported the complete mediation model. The summary of the results is presented in Figure 3. The amount of mediation was obtained by subtracting the regression coefficient (Permissive maternal style \rightarrow Academic achievement) in the fourth regression (when academic engagement controlled) from the regression coefficient (Permissive parenting style \rightarrow Academic achievement) in the first regression (with academic engagement not controlled). The reduction was $-.015 - (-.059) = .044$. Sobel test was conducted to check the significance of the indirect effect of the permissive parenting style on academic achievement via academic engagement. The results of the Sobel test confirmed that academic engagement significantly carries the influence of the parenting permissive style to academic achievement ($Z = -3.3908$, $P < .05$).

Table 4: Relationship between Permissive Parenting Style and Adolescents' Academic Achievement Mediated by Academic Engagement

Step	I V	D V	B	SE	Beta	t
1	Maternal Permissive. S	Academic Achievement	-.059**	.018	.16	-3.19
2	Maternal Permissive. S	Academic Engagement	-.747**	.217	.17	-3.43
3	Academic Engagement	Academic Achievement	.059**	.003	.69	19.05
4	Maternal Permissive. S	Academic Achievement	-.015	.014	.04	-1.11
	Academic Engagement		.059**	.003	.69	18.57

Note: B= Unstandardized coefficient; Beta= Standardized coefficient** $p < .05$

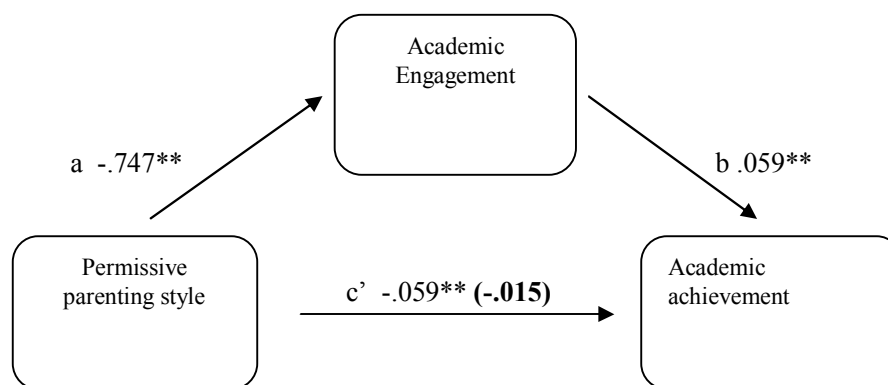


Figure 3: Mediation model

Discussion and Conclusion

Respondents of the present study were adolescent females and males aged between 15 and 18 years old. Results of the study indicated that a majority of the respondents perceived their parents as authoritative. This finding of the present study is consistent with past studies by Nouri (2007) and Saeedi (2003) which indicated that most of the participants of their study viewed their parents as authoritative. Based on Baumrind's (1970), respondents' report indicated that they may perceived that their mother give clear instructions, rationalized reasons for actions, show a sense of control and make their wishes clear in a way that the children see them as caring and warm. More than half of the respondents reported high academic engagement and academic achievement.

Pearson correction test indicated that students who had parents with authoritative style were more likely to have high academic engagement and academic achievement. Authoritative parenting style has positive influence on academic achievement. The present finding support past studies on parenting style and academic achievement (Pong et al., 2010; Ellefsen & Beran, 2007; Assadi et al., 2007; Lee et al., 2006; Park & Bauer, 2002). Authoritative parenting style resulted in several effects on the way adolescents developed and behaved and the positive influence of authoritative parenting style remains substantial during adolescence

(Baumrind, 1991 & Steinberg, 2001). Positive relationships between parents and their children can promote a healthy sense of competence and autonomy within the home which then becomes internalized and used in other settings such as schools (Furrer & Skinner, 2003). There are three possible reasons for the relationship between authoritative parents and children with high academic performance. Firstly, parents with such a parenting style give their children a feeling of being secure and cared for. The children feel comfortable and independent and this helps them to perform well in school. Secondly, such parents make it a point to explain their actions to their children to ensure that they understand the reason for any action. Such efforts by the parents to rationalize their actions to their children allow them to be aware of and to understand why their parents do what they do. They get to understand their parents' intentions, values and objectives in relation to their school work and school. Thirdly, parents who are authoritative have an open communication channel with their children. Due to such interpersonal communication with their parents, children develop their interpersonal skills and interact well with friends and peers. In general, they are well-adjusted and do well academically and socially (Spera, 2005).

Also, result of Pearson correlation showed students who had parents with authoritarian style have low academic engagement and

academic achievement. The finding is in line with Park and Bauer (2002) and Elias and Yee (2009) who didn't find any relationship between authoritarian parenting style and academic achievement. According to the effect of parenting style in childhood may have direct effect but the effect may alter to indirect when the children become adolescents (Glasgow, Dornbusch, Troyer, Steinberg, & Ritter, 1997). In adolescence period, their parents were ready to step away from direct parenting and engagement in the facets of their life such as in their academic (Paulson & Sputa, 1996). During this period, association of adolescents and their parents tend to alter and other factors such as relationship with peers have a stronger effect on their academic performance in schools (Steinberg, Dornbusch, & Brown, 1992).

In light of the relationship between permissive parenting style and academic achievement students under rearing parents with permissive have low academic engagement and academic achievement. Results from the present study support past findings (Pong et al., 2010; Roche et al., 2007; Assadi et al. 2007; Ellefsen & Beran, 2007; Lee et al. 2006), which found that permissive parenting relates to more school problems among adolescents. In permissive parents, negotiation and demands are relatively low. Responsive parents provide support and guide their adolescent children towards achieving specific goals (Pellerin, 2005). Therefore, when children feel rejected by their parents and do not get much parental guidance, they are more likely to do poorly in their academic endeavors. Eccles et al. (1983) believe that such children may be affected negatively in their academic work when they have parents who do not show any consistent parenting style or who seem to reject them. Encouraged and guided children who are praised for their achievements develop a sense of confidence and are likely to excel academically and prepared to take on challenges. And when such children succeed in their endeavors, they do their parents proud and in turn motivate them to give continued support to their children. In contrast, children who do not do well in school create strain and disapproval among their parents and this leads to even less satisfactory parenting ways.

Result of present study utilized that that students who were highly engaged in school activities, reported higher academic achievement. The present finding is consistent with the finding of past studies (Fallon, 2010; Haney, 2010; Wang & Holcombe, 2010; Sbrocco, 2009; Flower & Flower, 2008; Stewart, 2007; Sirin & Sirin, 2005) which concluded that school engagement is closely related to academic performance. Children feel that they have the attention and support of teachers and parents in their academic and school activities, they will naturally develop a special sense of belonging and attachment to both school and school-related activities, including academic activities. Thus, there is a tendency for such children to achieve higher grades and generally show better academic achievements. Also, students who value their education and have clear ideas about goals they wish to achieve will exhibit a desire for status attainment and be higher performing students (Carbonaro, 2005).

Finally, academic engagement completely (full) mediated the relationship between parenting authoritative style and permissive style with adolescents' academic achievement. Parenting authoritative and permissive style affects adolescent academic achievement primarily via academic engagement. Based on the Baumrind's Parenting Style Theory (1966), authoritative parents encourage their children to do well academically and explain the need for education in order to become a successful adult. Encouragement and explanation will motivate children to involve in school-related activities and achieves overall well-being. The authoritative parent also recognizes when their child is improving or learning new material and is satisfied most when it is done through hard work. Thus, the engagement in school activities leads to high academic achievement. In addition, authoritative parent is not angered by the child's mistakes; instead the parent wants the child to know that mistakes are part of the learning experience (Baumrind, 1971). Permissive parents do not involve in regulating their children's activities and exert no control on them. These parents may not even visit the school or the classrooms of their children or speak with a school adult involved with their children's educational experience

(Baumrind, 1971). The nature of this parenting style may negatively impact their children's academic involvement, which consequently leads to lower academic achievement.

Implications

In view of the value of academic success for students, parents, teachers and the community, results the appropriate and right techniques to prevent low academic achievement is vital. Based on the finding of this study parenting style, academic engagement has relationship with academic achievement among high school students. In other words, adolescent students with authoritarian and permissive parents are likely to drop out from school. Also, students who have low academic engagement are likely to drop out from school. Hence, methods of training parenting style for parent, implying that interventions designed to increase school engagement that may positively affect students levels of academic achievement, need to receive guidance about their education and occupational from teacher and parent must be devised in order to reduce the students' dropout rate and increase their academic achievement. Thus, it is recommended that parents' parenting in Iran be equipped with appropriate knowledge and strategies. It is further assumed that the information learned in this study has important implications to the Iranian Ministry of Education to better understand the factors which have strong influence on adolescent's academic achievement. It can also be potential input for improving educational policy.

The findings from the present study can also be used by the Ministry of Education should in conducting seminars to motivate and enhance students' academic engagement. The results of the present study will be a useful input to the organizations aimed at promoting family and adolescent development.

The present findings provide empirical basis for future research in academic achievement among adolescents in Iran. This study explains academic achievement in relationship to family and personal factors. Future study may venture into other unexplored phenomenon in academic achievement.

Recommendations for Future Research

This research is limited to these factors: parenting style, academic engagement and academic achievement. Familiarization and information regarding many relevant factors affecting academic achievement are significant for any educational organizations. However, this study was only conducted in Sirjan, thus its scope and generalization not representative other locations. Therefore, to strengthen the validity of the results and also to generalize to the other population, it is recommended separate studies are carried out in more locations. According to the framework of the present study, academic engagement is the mediating variable. However, there are many other variables, such as motivation and self-esteem, self-control, which could become mediating variables that could be studied in future, researches. It is also suggested that studies be carried out to include factors such as psychiatric disorders, family problems, financial problems and school problems such as teaching space, the number of students per class and type of teachers and their behavior which could affect students' academic achievement. In this research, the respondents were adolescents, thus the results were limited to this age group only and mothers. It is suggested that future studies be conducted among other age group. With respect to age, for instance academic achievement is different. This is because there are various problems encountered by the other age groups which are difficult to quantify.

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