Relationship between Parental factors and Academic performance among Adolescents in Kerman-Iran

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Abstract: The present study examined relationship between parental factors influencing students' performance or failure have always been a basic issue in education; however, despite the extensive line of research conducted and a large amount of budgets spent, there are still huge numbers of students who experience failure in academic performance each year. This study utilized a quantitative approach and correlation research design. Respondents of the study consisted of 400 male and female high school students who were identified by proportional stratified random sampling technique. Instruments for data collection included Buri’s Parent Authority Questionnaire and Paulson’s Parental Academic Involvement Questionnaire. The results of the Pearson correlation analysis showed that parents’ authoritative and permissive styles, parental school involvement were significantly related to academic performance.


Keywords: Parenting Style, Parental School Involvement, Academic Performance

Introduction

Adolescence is an intriguing stage of development filled with many physical, cognitive, social, and emotional changes. Blackwell, Trzesniewski, Kali and Dweck (2007) describe this period as a sensitive and critical time with important implications for school performance. At the same time, the increase in academic demands and the complexity of the school structure make the task of academic success for adolescents even more difficult (Patrikakou, 2004). Academic performance is the most important issue in education in Iran and it is therefore not surprising that many key people – from educators to sociologists and psychologists – have focused their attention and efforts to investigate academic performance and identify the reasons why some students perform well academically while others fail and drop out (Fouldi, 2007). Fathi (2006), for example indicates that such research has been focused on low academic performance as they have become a serious concern for many Iranian families, societies and even the governing authorities. Iran is no different from many other developing countries where problems in relation to low academic performance have arisen among children and adolescents. In recent years, countries such as Canada, has noted an increase in children with risk factors that may compromise their present performance 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 performance due to family problems and personal factors. Halawah (2006) argues that academic performance 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.

Parental school involvement is also an important factor in explaining adolescents’ academic performance. Parents’ desires are shown in the way they interact with their offsprings on academic and other school matters and through their involvement in school activities, communication with the educators in school and supervision in the home. These parents have children and adolescents who excel academically. Parents involved in their children’s activities through supervision of homework and selection of school (Fan, 2001; Anguiano, 2004; Lee & Bowen, 2006; Easton, 2010). Based on the problem discussed, the following research questions were formulated: 1. what are the levels of parenting style, parental school involvement and academic performance? 2. What are the nature of relationship between parenting style, parental school involvement and academic performance?3. Are there any differences in academic performance between male and female respondents?

Method

Participations and Procedure: Participants included 382 Iranian high school students (191 male, 191 female) that attended a south eastern in Sirjn. The ages of the participants ranged from 15 to 18 years, with the average age being 16.50 years (SD = 1.11). Data collected during the 2010 summer school classes. Research packets that included an informed consent form and questionnaires were distributed to students. After given instructions, students read the informed consent form, completed the questionnaires, and returned them to the proctor.

Instruments

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. 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.

Parental School Involvement: Parental school involvement was assessed using the 22-item of Paulson’s Parental Academic Involvement (1994). This scale was designed to identify support and participation of parents at homeand at the school site that directly and positively affect the educational performance of all children. This scale has three dimensions such as performance values (8 items), interest in schoolwork (9 items) and involvement in school functions (5 items). The response format consisted of a five-point Likert scale on which respondents indicated whether they 1= very unlike, 2= more unlike than like, 3= neither like nor unlike, 4= more like than unlike nor and 5= very like with parental school involvement. The score for parental school involvement was calculated by summing the scores for the 22 items after reversing the scores for 5 items (items 5, 6, 11, 16, and 21). The total scale score ranged from 22 to 110, with high scores indicating higher parental school involvement. Paulson (1994) reported reliability results from the parental school involvement questionnaire with Cronbach coefficient alpha values of .85 for the mother’s school involvement and .81 for the father’s school involvement. In the current study, alpha reliability for the scale was .70.

Academic Performance: Respondent’s academic performance 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 performance (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 performance.
Analysis of Data

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 was Pearson Correlation Analysis to conduct of relationship between parenting style, parental school involvement and academic performance.

Results

Descriptive statistics

Table 1 shows descriptive statistics were to describe the background of respondents (age and gender) and the pattern of parenting style, parental school involvement and academic performance.

Table 1: Age, Gender, and Level of Study variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (N=382)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>200</td>
<td>50</td>
</tr>
<tr>
<td>Male</td>
<td>200</td>
<td>50</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Years</td>
<td>99</td>
<td>24.9</td>
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<tr>
<td>16 Years</td>
<td>101</td>
<td>25.1</td>
</tr>
<tr>
<td>17 Years</td>
<td>99</td>
<td>25.1</td>
</tr>
<tr>
<td>18 Years</td>
<td>101</td>
<td>24.1</td>
</tr>
<tr>
<td>Mean</td>
<td>16.50</td>
<td>1.11</td>
</tr>
<tr>
<td>Parental school involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>187</td>
<td>46.6</td>
</tr>
<tr>
<td>High</td>
<td>213</td>
<td>53.1</td>
</tr>
<tr>
<td>Parenting style</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritative style</td>
<td>294</td>
<td>75.4</td>
</tr>
<tr>
<td>Authoritarian style</td>
<td>58</td>
<td>13.6</td>
</tr>
<tr>
<td>Permissive style</td>
<td>48</td>
<td>11</td>
</tr>
<tr>
<td>Academic performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>low</td>
<td>152</td>
<td>37.5</td>
</tr>
<tr>
<td>high</td>
<td>248</td>
<td>62.5</td>
</tr>
</tbody>
</table>

Correlation analysis

The Pearson correlation analysis was conducted to examine the relationships between background characteristics (age, family income), parenting style, parental school involvement and academic performance. The result of the study in Table 2 indicated a significant negative relationship between age and academic performance of adolescents (r=-.14, p<.01). This means that respondents who are older reported lower academic performance.

However, the strength of correlation between age and academic performance is quite weak. Pearson correlation test was also showed that family income and academic performance was significantly correlated (r=.13, p<.01), however, the strength of correlation between family income and academic performance is weak. This finding indicated that respondents from high income families showed higher academic performance.
As shown in Table 2, there was a weak positive and significant relationship between parenting authoritative style and academic performance ($r = .25$, $p < .01$). The positive correlation coefficient indicated that an increase in the score for authoritative parenting style is followed by an increase in the adolescents’ academic performance. Adolescents with authoritative parents were more likely to perform better in academic aspects. Also, there was a negative correlation between maternal authoritarian style and academic performance ($r = -.037$, $p > .05$). This means that mothers who are highly authoritarian, have adolescents children with lower academic performance. However, the relationship was not statistically significant.

Also, there was a negative significant correlation between permissive parenting style and academic performance ($r = -.16$, $p < .01$). This means that parents who are highly permissive, have adolescents children with lower academic performance. The strength of correlation between parenting permissiveness and academic performance is weak. Also, Pearson correlation test was conducted to examine the relationship between parental academic involvement and academic performance. As shown in Table 2, there was a moderate positive significant relationship between parental school involvement and academic performance ($r = .44$, $p < .01$). The positive correlation coefficient indicates that an increase in the score for parental school involvement is followed by an increase in the adolescents’ academic performance. Adolescents with higher parental school involvement were more likely to succeed in academic activities.

### Table 2: Correlation Matrix of Study Variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 Authoritative Parenting</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2 Authoritative Parenting</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3 Permissive Parenting</td>
<td>.24**</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X4 Parental School Involve</td>
<td>.37**</td>
<td>-.001</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X5 Age</td>
<td>-.064</td>
<td>.027</td>
<td>-.047</td>
<td>.036</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X6 Family Income</td>
<td>.110*</td>
<td>-.092</td>
<td>-.072</td>
<td>.114*</td>
<td>.184</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Y  Academic Performance</td>
<td>.25**</td>
<td>-.037</td>
<td>-.16**</td>
<td>.43**</td>
<td>.65**</td>
<td>.59**</td>
<td>1</td>
</tr>
</tbody>
</table>

Analysis of the difference in academic performance between male and female adolescent

T-test was conducted to test the significant difference in academic performance between male and female respondents. The results are displayed in Table 3, findings of the study showed that there was a significant difference ($t = 6.786$, $p < .05$) in academic performance between male (mean = 16.52, SD = 2.760) and female (mean = 18.04, SD = 1.417) adolescents. Female adolescents had higher academic performance scores than male adolescents.

### Table 3: Result of t-test for academic performance by gender

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Performance</td>
<td>400</td>
<td></td>
<td></td>
<td>6.786</td>
<td>.001</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>200</td>
<td>18.04</td>
<td>1.417</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>200</td>
<td>16.52</td>
<td>2.760</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion and Conclusion

Based on the first research question, majority of the respondents reported that their parents were authoritative. The remaining respondents perceived their parents as authoritarian and permissive. 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. Also, more than half of the respondents reported that their parents were highly involved in their activities related to school.

The second research question in present study indicated that older respondents had lower academic performance. The present finding is consistent with the findings of past studies (Leiw et al., 2008; Nadery et al., 2009; & Yousefi, 2010) which concluded that age is negatively correlated with academic performance. According to Davis-Kean (2005),
students’ academic success is often associated with techniques used by parents and teachers for different age groups. In general, parents and teachers tend to focus more on younger children compared to older children due to the belief that older children can learn better. Then, the beliefs of attitudes of parents and teachers may affect academic performance among adolescent from different age groups.

Also, Respondents from high income families reported high academic performance. This finding is similar to the past studies (Davis–Kean, 2005; Hamidian, 2005; Thomas, 2005; Mullis et al., 2003; & Whitehead, 2006) which indicated that family income is positively related to academic performance. Family income may influence academic performance through provision of resources necessary for academic enhancement such as food, sufficient appropriate place to study, and private classes (National Center for Educational Statistics, 2009; Sirin, 2005). Inability of parents to provide necessary resources may explain why students from low-income families have higher tendency to drop out from school (National Center for Educational Statistics, 2009).

As for parenting style, there was a significant positive relationship between parenting authoritative style and academic performance. Students who had parents with authoritative style were more likely to have high academic performance, while students who had parents with permissive style were more likely to have low academic performance. The present finding support past studies on parenting style and academic performance (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). In contrast, 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 performances 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.

In light of relationship between parental school involvement and academic performance there was positive relationships between parental school involvements. The result of this study is consistent with Fallon (2010), Rogers et al. (2009), Stewart (2007), Jeynes (2007), Lee & Bowen (2006), and Anguiano (2004) which found that high levels of parental school involvement is related to adolescents’ academic performance. When parents are involved in the education of children and adolescents, there are several positive outcomes. First of all, the involvement of parents in their children’s education helps the teaching staff to appreciate the students’ needs. Such involvement also means parents are better able to contribute their support to their children’s homework and in the process can better understand the challenges their children face in their studies. Molland (2004) and Mylonakou and Kekes (2007) also indicated such findings that showed the importance of communication between parents and teachers, which goes a long way for them to cooperate in helping the child to develop, understand his/her weaknesses and appreciate the child’s strengths. In this way, the child enjoys the opportunity of developing personal character as well his/her full academic potential. Educators have realized the critical role that parental involvement in
the school activities of a child can play in his/her education and see this as a useful tool that can be used in different circumstances as holistic approach to education (Christenson & Sheridan, 2001).

**Implications**

**Practical and Policy Implication**

Considering the importance of academic performance for students, parents, teachers and the community, finding the appropriate and right techniques to prevent low academic performance is essential. Based on the result of this study parental parenting style, parental school involvement, have relationship with academic performance among high school students. In other words, adolescent students with authoritarian and permissive parents are likely to drop out from school. 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 performance. 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 performance among adolescents in Iran. Future study may venture into other unexplored phenomenon in academic performance.

**Reference**


2/2/2013