The Relationship between parenting styles, parenting practices, maternal education level with physical activity levels among adolescent girls

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Abstract

The purpose of this study was to survey the relationship between parenting styles and physical activity levels, among adolescent girls in Rasht. The study was based on the descriptive-correlation method. The statistical population is composed of entire adolescent girl's athletes in city of Rasht in Iran which was selected as samples. They are 400 adolescent girls’ athletes, its mean age of 15.59±1.1 years, height 164.23±6.94 cm, and weight 57.32±11.71 kg and body mass index 21.19±3.81 kg.m² respectively volunteered to participation in this study. Data were collected by physical activity Questionnaire (PAQ-A) and Parenting Style Inventory II (PSI-II). The reliability was measured by Cronbach's Alpha (α=0.78, α=0.83) at p=0.05. The data were analyzed through some statistics techniques such as Kolmogorov-Smirnov test and Pearson correlation coefficients. The results show that there were no significant correlation between physical activity levels and parenting styles (Authoritarian, Authoritative) in Mothers. But the relationship between physical activity levels and Permissive was negative. Also, there was negative relationship between performing physical activity in students and characteristics of parents’ education level. According to research findings can result that other factors influence on physical activities, too. For achieving clear information in this field, it is necessary more research.

Keywords: parenting style, physical activity, adolescent girls, Mothers

Introduction

Inactivity is one of the most important challenges about public healthy in all of the world that it has been known as an global epidemic (Chief Medical Officer, 2004), as if it is estimated ³/₄ of mortality is because of uncontagious diseases in 2020 (Kelishadie et al., 2007). Prevalence of increasing from day to day overweight and obesity in children is the main problem of community’s healthy and inactivity life style isn’t without effect in development of this process. In this direction, regular physical activities can cause maintenance and development of healthy and it can help in prevention of cardiovascular diseases, diabetes and some cancers. Also, these activities cause to improve mental performance. In spite of physical activities recommendations for people in all ages, participation in
sport and physical activity has been recommended especially for age of youth and adolescence. Existence of lower levels of unsocial behavior in athletes, higher levels of positive feeling to be good and more sport participation in middle age are mentioned reasons for importance of sport participation in young and adolescent (Cleland et al., 2005). During several decades which pass from coming into existence sport sociology, recognition of effective factors on participation in physical activities is the most challenging cases and participation motives and drop out of sport and physical activity in the young have been propounded as fields which should be studied (Eccles et al., 1991). However factors such as age, sex, perception of ability, capacity and level of sport have been known as effective factors for participation in physical activities. One of the most important effective factors in this field are significant others. The studies have shown that significant people such as parents, friends, teachers and coaches influence on level of adolescent and children’s physical activity (Eccles et al., 1991; Weiss et al., 1995). Parents have important role in encouraging children to physical activity before adolescence periods (King et al., 2008; Eriksson et al., 2008). Patterns and parent’s physical activity level has significant effect on their children’s physical activity (Lau et al., 2007). According to parent’s role in development of sport experiences in adolescent athletes, interest to consider parent’s effect on adolescent sport activities is increasing. Because children emphasize on parent’s evaluation about their performance, so children import parent’s expectation and feedback about their exercise performance and effort (Klaudia, 2009). As mentioned, parents influence on their children’s behaviors and this effect is related to parenting style (Baumrin, 1991). Parenting styles explain quality of relationship parents to their children (Jago, 2011). In fact, parenting style is explained as a set of behaviors that it describes parent-child interaction in spread range of situations (Alizade et al., 2002). Darling and Steinberg (1993) defined parenting styles as “set of attitudes relative to children that it results to create emotional climate due to parent’s behaviors generally”. Parenting styles basis on Barmerind’s studies (1991) are classified to three parenting styles: authoritative, authoritarian, and permissive. Authoritative parenting style emphasizes on children’s autonomy in limit of family’s regulations. In this style, parents know what their children do, where they go and who their friends are. In any case, they try to present convincing reasons about their expectations and they are ready to adjust their demands. Authoritarian parenting style is recognized to severity and in flexibility. Authoritarian parents want to be obeyed their orders. In this style, priority is with parent’s expectations. In permissive parenting style, parents don’t follow defined rules in children’s training and they don’t have control on their behaviors. They release children in decision making and children don’t consult with parents (Asadi et al., 2006). Since parent’s attitude in relationship with parenting styles is in effect of cultural and social problem. As a result, parenting styles may differ for different groups (Cardona et al., 2000). Every family use especial styles in children’s personal and social training (Hardy et al., 1993). Although permissive parents are relatively conservative about their children but they consider to rightful to their children as elders (Baumrin, 1991). Authoritative parents give mental independence and freedom to their children (Summers et al., 2006). Yusuf (2004) found that one of the reasons for weak performance of children may be due to the parenting styles by their parents. Gustafson et al., (2006) also stated parenting styles describe parenting styles of behaviors with especial definition as act which use one of the parents for easier performance of child’s physical activity. Hennessy et al (2010) in study which do on 76 young people in USA, they reported that children with permissive mothers are more active and there is relationship between supportive activity and increasing activity. Also reported that girls who had permissive mothers in comparison with girls who had authoritative mothers, they spend more time for physical activity (Jago, 2010). Woolger and Power, (2000) consider effect of parenting styles on intrinsic motivation in group of swimmers. The results indicated that just mother’s training style predict children’s intrinsic motivation. Also, authoritarian style had negative relationship with intrinsic motivation and authoritative style had positive relationship with intrinsic motivation. Ornelas et al., (2007) research results indicated that family cohesion, parent-child relationship and parent’s participation predict physical activity in children positively. Holt et al., (2009) consider parent’s parenting styles and policy which have for their adolescent girls. The results indicated that autonomy supportive parents (similar to authoritative parents) participate in exercise with children and provide situation for their children. Controlling parents (similar to authoritative parents) participate in children’s physical activity, too. But they aren’t sensitive to mental reactions, having friendly relations with them and analysis of children’s independence. According to mentioned issues, we can state that parents have important role in developing attitudes and behaviors in children. By considering accomplished studies in other countries and lack of research in our country and also importance of sport in adolescent girls,
researchers decide to consider relationship between parenting styles and level of physical activity in female students in Rasht high schools.

**Materials and Methods**

**Participants**
The method of research is descriptive-correlative that it was performed to field form. Statistical population was entirely of 14-17 years old female students in city of Rasht in Iran. For determining sample of research, it was used random sampling in multistage. Rasht city is devised to 2 districts. Researchers selected 400 female students in high school randomly. Its mean age of 15.59±1.1 years, height 164.23±6.94 cm, and weight 57.32±11.71 kg and body mass index 21.19±3.81 kg.m² respectively volunteered to participation in this study. Data of 360 possessing qualification questionnaire were analyzing.

**Measures and procedure**
For gathering information were used two questionnaires. Then the parenting style questionnaire II (PSI-II) was distributed that first time it has been used by Robinson, Mandleco, Olsen, Bancroft-Andrews, McNeilly and Nelson for parent’s parenting styles and for recognizing parenting styles in different situation extent in 1995. Form of 32 items of this questionnaire is the most known type. In this research, it has been used form of 32 questions which measures 3 scale: authoritarian, authoritative and permissive. Each of two authoritarian and authoritative styles consists of two micro-scales and permissive style consists of one micro-scale. The reliability guided cronbach alpha value of (0.83) which has high reliability. Also the physical activity Questionnaire PAQ-A provide a general measure for ages 8-20 and it was evaluated by Kowalski et al in 1997. The PAQ-A measure level of physical activity during 7-day ago and it is used for classifying children and adolescence with different levels of physical activity (Kowalski et al., 1997; MacKelvie et al., 2001). The method of scoring is 5-point Likert scale. Also in present research, with removing some questions and evaluating by professors of sport sciences, its reliability guided cronbach alpha value of 0.78 which has high reliability.

**Data analysis**
For organizing and summarizing scores and describing gained measurement of samples was used descriptive statistics (frequency, percentages, tables and pattern), kolmogorov-smirnov test and Pearson Correlation Coefficient. Employing the SPSS software (ver.19), data were analyzed at significance level of 0.05.

**Results**

**Internal reliability and descriptive statistics**
Subject anthropometric data are present in table 1, 2. In figure 1, 2 show mean percentage physical activity levels among male and female. The results in table 1 show frequency distribution some personal characteristic in mothers and adolescent girls. Most and least percentage of parent’s educational level belong to diploma (41/5%) and higher diploma (8/5%), most and least percentage of occupational situation belong to free job (40/8%) and unemployed (24/7%).

Most and least percentage of occupational record belongs to 15-20 year (40/8%) and 1-5 year (10/6%), (Tables of 2, 3, 4, 5).

Table 6 show level of physical activity in female students, to consider being normal data distribution was used kolmogorov-smirnov test.

According to be normal distribution, for considering relationship between reasons of motivational sport participation and parent’s parenting styles was used Pearson Correlation Coefficient. The results of table 8 show that there isn’t significant correlation between level of physical activity and authoritarian parenting style (r=0.083) and authoritative (r=0/104) in mothers but there is negative relationship between level of physical activity and permissive style (r=-0.031) in mothers. Also, the result of table 8 shows that there is negative relationship between physical activity and parent’s educational level.
Table 1: personal characteristics in mothers and girls

<table>
<thead>
<tr>
<th>Test</th>
<th>Subjects</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Mother</td>
<td>33.8</td>
<td>10.21</td>
</tr>
<tr>
<td></td>
<td>Girl</td>
<td>0.59</td>
<td>1.1</td>
</tr>
<tr>
<td>Height</td>
<td>Mother</td>
<td>0.31</td>
<td>8.93</td>
</tr>
<tr>
<td></td>
<td>Girl</td>
<td>0.23</td>
<td>6.94</td>
</tr>
<tr>
<td>Weight</td>
<td>Mother</td>
<td>0.12</td>
<td>12.78</td>
</tr>
<tr>
<td></td>
<td>Girl</td>
<td>0.32</td>
<td>11.71</td>
</tr>
<tr>
<td>BMI</td>
<td>Mother</td>
<td>0.17</td>
<td>4.87</td>
</tr>
<tr>
<td></td>
<td>Girl</td>
<td>0.19</td>
<td>3.81</td>
</tr>
</tbody>
</table>

Table 2: Educational level

<table>
<thead>
<tr>
<th></th>
<th>Under diploma</th>
<th>diploma</th>
<th>Higher diploma</th>
<th>licentiate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>39.4</td>
<td>41.5</td>
<td>8.5</td>
<td>10.6</td>
</tr>
</tbody>
</table>

Table 3: Occupational Situation

<table>
<thead>
<tr>
<th></th>
<th>Governmental</th>
<th>Free job</th>
<th>Unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>34.5</td>
<td>40.8</td>
<td>24.7</td>
</tr>
</tbody>
</table>

Table 4: occupational record

<table>
<thead>
<tr>
<th></th>
<th>unrecorded</th>
<th>(1-5) year</th>
<th>(5-10) year</th>
<th>(10-15) year</th>
<th>(15-20) year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>23.9</td>
<td>10.6</td>
<td>13.4</td>
<td>11.3</td>
<td>40.8</td>
</tr>
</tbody>
</table>

Table 5: Residential Situation

<table>
<thead>
<tr>
<th></th>
<th>city</th>
<th>Village</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>93.0</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Table 6: mean and standard deviation of physical activity levels among female

<table>
<thead>
<tr>
<th>Physical activity</th>
<th>Gender</th>
<th>N</th>
<th>Mean ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>female</td>
<td>360</td>
<td>59.75 ± 11.32</td>
</tr>
</tbody>
</table>

Significant level of p<0.05

Table 7: the relationship between parent’s educational level and physical activity level with using Pearson Correlation Coefficient

<table>
<thead>
<tr>
<th>Parent’s educational level</th>
<th>Female physical activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>-0.026</td>
</tr>
<tr>
<td>A</td>
<td>0.75</td>
</tr>
</tbody>
</table>

*significant at level of p<0.05

Table 8: the relationship between parenting style and physical activity level with using Pearson Correlation Coefficient

<table>
<thead>
<tr>
<th>Mother’s parenting style</th>
<th>Physical activity level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritarian</td>
<td>0.083</td>
</tr>
<tr>
<td>Authoritative</td>
<td>0.104</td>
</tr>
<tr>
<td>Permissive</td>
<td>-0.031</td>
</tr>
</tbody>
</table>

*significant at level of p<0.05
Discussion and Conclusion

The purpose of this research was relationship between parenting style and mother's educational level with physical activity level among female students in Rasht city. In fact, adolescence motivation for participation in physical activity program indicates their orientation relative to main aspects of physical activity. This orientation depends on individual, personality, family and social different matters, program conditions and coach and etc. However; effective factors on adolescent participation in physical activities will be known better, it would help more to provide basic matters of adolescent orientation to sport and physical activity.

As a result, paid expense for this purpose is changed to invest for having efficient and safe human forces for organizations. According to table 7 results, there is negative relationship between student's physical activity and parent’s educational level. However, achieved results are contradictory with other researcher’s findings.

It observed significant relationship between parent’s educational level with leisure time rate and participating students to sport (Zareie, 2002). Dastgheib, (2000) found with increasing age is reduced motion activities and subject’s sport, from the other side, with increasing education level increase subject’s physical activity level. The studies have shown that Economical and social life level and parent’s educational level has direct effect on adolescent physical activity (Aziz et al., 2009). Wugner, (2004) reported however parent’s educational level was lower; children had less physical activity and more overweight in east of France. Also he indicated that adolescent who had mothers with higher educational level, they had more physical activity.

Sallis and Own (1999) indicated that children who have parents with high education are more active than children who have parents with low education. According to present research results, there is negative relationship between parent’s educational level and adolescent orientation for performing sport activities that this result is contradictory with Wagner and Salis and Own results. However, attitude point to people’s awareness and perception in situations, but can state that if level of knowledge and awareness promote in society’s people, their attitude become worse relative to social matters.

However, it is a negative point for educated people. Therefore; we expect that this problem isn’t an excuse for abandoning physical activity program, because in every country, this matter can be effective in development and generalization of sport in country. Table 8 results showed that there were no significant correlation between physical activity level and authoritarian and authoritative parenting style in mothers but it was observed negative relationship in permissive parenting style.

These results are similar to Samerz et al., research (2006) that they don’t observe significant correlation between physical activity level and parenting style. In opposite of these findings, Schmitz et al (2002) found that girls whom their mothers use authoritative parenting style, they have high level of physical activity and low level of inactivity. Also, this conclusion didn’t have justification with Yusuf (2004), Hensi et al., (2010), Jaco et al., (2011), Gustovson and Rudez, (2006), Pugliese et al., (2007), Davison et al., (2003), Arredondo et al., (2006) statements about having significance relationship between parenting style and children’s physical activity level.

These contradictions might be as a result of some factors. For example; in study which was performed on students of grade 2 and 4, it was observed positive relationship between high self-
confidence and participation in physical education class (Xiang et al., 2003). In study which was performed by Eccles et al., (1984) and Lee et al., (1999), they stated that gender difference is an effective factor on student’s participation level in physical activity. Also, Greenockle et al., (1990) reported that friends and reaches have significant effect on children's participation in physical activity. Antsil et al., (2000) reported physical activity in children may develop due to special factors such as age, gender and feeling of self-confidence. However; Eccle’s expectancy-value model state that people's motivational beliefs is the strongest predicator for selecting activities, but the ory's background support motivational beliefs and selecting activities by greater background. Parents and friends are two main factors in this relation.

That their effect can be to different forms, For example; parents can decide for children’s activities as a chief without consider to their idea, but vice versa there are parents who support children’s sport interest. Also, parents may discourage children in an activity or emphasize on one field more than other fields. According to Eccle’s expectancy-value model influence these factors on children’s participation in activities by changing in motivational beliefs (Simpkins, Andrea & Jennifer 2010).

It seems this research results help in using more ideal methods for recognizing adolescent female motivational needs. In addition, it can present useful information to parents and coaches that create proper background for increasing motivation and instruction in female athlete. According to research findings, we can conclude that there are several reasons why our findings didn’t indicate relations between parenting style and physical activity level. One of the reasons may be for insufficiently of selected sample, however it seems sufficient for this analysis. For achieving to clear information in this field, it seems more researches necessarily.

References


