

# The Association Between Fathers' Fatherhood Characteristics and High School Students' General Health in Shiraz in 2015

Shohreh Javadpour<sup>1</sup>, MSc;  
Mehdi Kargar<sup>2</sup>, PhD Candidate;  
Hajar Haghshenas<sup>3</sup>, MS;  
Mohammad Hosein Kaveh<sup>4</sup>, PhD

<sup>1</sup>Department of Nursing, Nursing School, Jahrom University Of Medical Sciences, Jahrom, Iran;

<sup>2</sup>Student of Health Education and Health Promotion, Health Education and Health Promotion Department, Health School, Shiraz University of Medical Sciences, Shiraz, Iran;

<sup>3</sup>Department of Nursing, Nursing and Paramedical School, Gerash, Iran;

<sup>4</sup>Department of Health Education and Health Promotion, Health School, Shiraz, University of Medical Sciences, Shiraz, Iran

## Correspondence:

Mohammad Hosein Kaveh, PhD;  
Associate Professor, Department of Health Education and Health Promotion, Health School, University of Medical Sciences, Shiraz, Iran  
Tel: +98 71 37251001  
Email: kaveh@sums.ac.ir  
Received: 2 July 2019  
Revised: 17 August 2019  
Accepted: 23 September 2019

## Abstract

**Background:** The role of fathers in adolescents' health is regarded as less important than mothers. This necessitates considering their role more than before. The present study was conducted to investigate the associations between high school students' demographic profile and their general health with the fatherhood characteristics of their fathers.

**Methods:** This descriptive-analytical and cross-sectional investigation was conducted among 495 girl and boy students in 2015 in Shiraz (Iran). The data collection tools included two self-administered questionnaires and a General Health Questionnaire (GHQ). Two self-administered questionnaires consisted of 5 demographic and 16 fatherhood characteristics questions. They were selected through a simple random sampling method, and the data were analyzed by Pearson correlation and descriptive statistics. The significance level was considered as 5%.

**Results:** The findings showed that 495 students (46.90% girls and 53.10 boys) participated in the present study. They also demonstrated that 382 students were between 15-17 years old (79.20%) and 113 of them (20.80) aged about 18-19. There was significant associations between the mean scores of students general health and some of their fatherhood characteristics ( $P=0.01$ ). Some of their demographic information was also correlated to their general health significantly. The mean scores of fatherhood characteristics and students' general health were, in turn,  $38.56 \pm 14.6$  and  $44.99 \pm 9.69$ .

**Conclusion:** This study demonstrated the role of fathers in their offspring's health status. It makes it necessary to educate fathers and reinforce their capabilities to promote their children's health.

Please cite this article as: Javadpour S, Kargar M, Haghshenas H, Kaveh MH. The Association Between Fathers' Fatherhood Characteristics and High School Students' General Health in Shiraz in 2015. *J Health Sci Surveillance Sys.* 2019;7(4):188-193.

**Keywords:** Student, Father, Health

## Introduction

Adolescence is an episode of development during which adolescents experience considerable biological, psychological, social, and environmental changes. They are confronted with managing several health challenges.<sup>1</sup>

<sup>2</sup> Meanwhile, mental health has come to be known as one of the most crucial debates in childhood and adolescence during the last decades.<sup>3</sup> On the other side, the family is

defined as the center of development during all periods of life, especially for adolescents. Father, as a leading member of the family, is supposed to have a unique role in the family.<sup>1</sup> Nevertheless, the limited number of research has been conducted on the role of fathers and their responsibilities towards children. Typically, they have had power over the family.<sup>4</sup> But in recent decades, there was a new attitude persuading them to become more involved and accept the importance of their roles as

supporters, care providers, friends, and even instructors.<sup>3</sup> When fathers are engaged in their offspring's lives, it provides advantageous benefits such as more qualified educational achievements, psychological welfare, and social behavior.<sup>5</sup> However, they carry out their fatherhood responsibilities toward their children, especially adolescents, less than expected.<sup>6</sup> The National Fatherhood Initiative in U.S. states that there is a "father factor" making social problems, child poverty, weak educational results, crime, behavioral and emotional challenges.<sup>7</sup>

Aggression, addiction, and juvenile delinquency can be regarded as some of the most important challenges made by fading the role of parents in their children's development.<sup>8</sup> They cause to open the atmosphere for influencing social environments and unwanted factors so that adolescents and children become more susceptible to being caught by plenty of problems such as depression, education disqualification, mental disturbances, escaping from home, and so on.<sup>9</sup>

If the parents can fulfill their responsibilities efficiently, the risk of mental problems in adolescents will decrease.<sup>10</sup> This can be recognized by determining the fatherhood characteristics supposed to be regarded by the fathers. The present study was conducted to assess the association between students' general health and their demographic profile with their fathers' fatherhood characteristics.

## Methods and Materials

This is a cross-sectional and descriptive-analytical study conducted in 2015. The studied population consisted of 604 male and female high school students (308 girls and 296 boys) from the 1st and 4th Shiraz Education Department's zones, which were selected through simple random sampling. The sample size was determined based on Thomas J. et al. study<sup>11</sup> and the following formula:

$$n = \frac{z^2 \sigma^2}{d^2} = \frac{1.96^2 \sigma^2}{0.0094 \sigma^2} \cong 495$$

This formula is used to determine the sample size in the cross-sectional investigation based on the mean estimate. It needs determine variance,  $d$ , and error type one (it was considered 0.05%).

The researchers introduced the goals of the project for the manager of the Research Branch of Education Department. After justifying the study's stages, the researchers were allowed to select two zones of Education Departments randomly. Then, four high schools (two girl and two boy high schools) in the 1st and 4th Shiraz Education Department's zones were selected randomly to conduct this investigation. The classes in every high school were selected randomly

and consisted of all four grades, including 1<sup>st</sup> to the 4th grades. The inclusion criteria included the following items: studying in the 1<sup>st</sup> to the 3<sup>rd</sup> high school classes grades and having the tendency to take part in the study. The exclusion criteria included filling out the questionnaires. The students completed the informed consent form before commencing the investigation. They were assured that their data were kept confidential.

The data were collected through two self-administered questionnaires and also GHQ (General Health Questionnaire). A demographic questionnaire had five questions including students' gender and age, their parents' remarriage status and health status and also their education level.

The second questionnaire included 16 items of fatherhood characteristics. The questions of this questionnaire were designed by three faculty members of health education and health promotion. They used scientific texts and their academic experience for developing this questionnaire. Its face validity was affirmed by five scholars of health education and health promotion specialists. The reliability of the second questionnaire was measured through its completion by 30 students with the same criteria of the present study ( $\alpha=0.8$ ). Each item of the second questionnaire was rated by using a 4-point rating Likert scale (always, often, sometimes, and seldom). The scores of 1 to 4 were given to "seldom" to "always" options, respectively. Two examples of these items are as follows: "Does your father respect his family members (your mother and siblings)?" And "Does your father strive enough to provide your educational needs?" Its total score was measured by summing the single score of every item. The range of this overall score was supposed to be from 16 to 64.

The achieved data were analyzed by SPSS (version 19). The Pearson correlation and descriptive statistics were also used. The health status of the studied students was examined by GHQ. It is an international tool, with 28 questions in physical, anxiety signs, and social function and depression dimensions. Its internal consistency was achieved as 0.84 in Tofighi's study.<sup>12</sup> GHQ is one of the most popular and known psychiatric tools. The T-Independent test was used to compare the results. The significance level was considered to be 5%.

## Results

The present findings showed that 495 students (46.90% girls and 53.10% boys) participated in this study. Some of the students filled the questionnaires incompletely and were removed from the study. It was also demonstrated that 382 students were between 15-17 years old (79.20%), and 113 of them (20.80%) aged about 18-19 years. It is

reported that 17.2 and 82.8% of their mothers had, in turn, academic and non-academic education. Meanwhile, 17.8 and 82.2% of their fathers also had academic and non-academic education, respectively. It was shown that 1.4% of their mothers and 4% of their fathers remarried, respectively. In addition, 0.8 and 6.8% of their mothers suffered from at least one kind of disabilities or chronic diseases, respectively, and the rest of them (92.1%) were physically healthy. Also, 3.4 and 6.4% of their fathers had, in turn, one kind of disabilities or chronic diseases, and 90.2% of the fathers were reported to be healthy. The division of age brackets into five separate ones was due to the impact of age on their physical and mental health conditions. Moreover, the health of 4<sup>th</sup>-grade students was possibly more susceptible to being affected by threatening factors due to their preparation for the entrance exam of university (Table 1).

Table 2 shows that there were significant associations between the health status of students' fathers (P=0.001) and mothers' (P=0.016) with some fatherhood characteristics. In addition, gender and age of these students were, in turn, correlated significantly with their general health status (P=0.02, P=0.002). No other significant correlation was seen between the demographic characteristics and other studied variables. The mean scores of fatherhood characteristics and general health of the studied students were reported as 38.56±14.6 and 44.99±9.69, respectively. (Table 2)

Table 3 illustrates that there was a significant correlation between students' general health status and their parent's fatherhood scores.(P=0.01). In other words, those students whose fathers regarded their

fatherhood responsibilities more had a higher level of general health. (Table 3)

Table 4 indicates that there was a correlation among students' general health status and the fatherhood's characteristics. It illustrates that most of these characteristics (10 characteristics out of 16) were correlated with their general health status. This proves the role of fatherhood characteristics in their health status (Table 4).

### Discussion

The present study was conducted to investigate the fatherhood characteristics of high school students and their associations with students' general health and their demographic profile.

There were significant associations between the health status of students' fathers (P=0.001) and mothers (P=0.016) with some fatherhood characteristics. It declared that the father's health condition affected their fatherhood roles. These findings were consistent with the results of Natalia Moskvicheva et al study.<sup>4</sup> Naturally, when fathers are more healthy, they are more possible to carry out their fatherhood responsibilities efficiently.

In contrast, chronic illnesses and disabilities impose a huge burden on families economically and emotionally. It deteriorates the interactions between fathers and their offspring.<sup>13</sup> Meanwhile, it is also proved, in the present investigation, the significant role of mothers in reinforcing family structure in a way that it helps fathers do their fatherhood roles more

**Table 1:** Demographic Characteristics of the Studied Students

Variable		Frequency	Percentage (%)
Gender	Male	263	53.10
	Female	232	46.90
Age	15 years old	10	2.00
	16 years old	61	12.30
	17 years old	310	62.60
	18 years old	104	20.80
	19 years old	10	2.00
Mothers Education	Academic	85	17.20
	Non-academic	410	82.80
Fathers Education	Academic	88	17.80
	Non-academic	408	82.20
Mothers Remarriage	Yes	7	1.40
	No	488	98.60
Fathers Remarriage	Yes	20	4.00
	No	475	96.00
Mothers Health Status	Healthy	456	92.00
	Disabled	4	.85
	Chronic	33	6.70
Fathers Health Status	Healthy	444	89.70
	Disabled	17	3.30
	Chronic	33	6.20

**Table 2:** The Mean Scores of the Studied Students' Demographic Characteristics and Their Correlation with Fatherhood Characteristics and General Health Status

Variables	Fatherhood Characteristics			P value	General Health		P value
	Mean	SD			Mean	SD	
Gender	Male	46.35	8.5	0.5	37.11	13.8	0.02
	Female	43.80	8.2		39.70	15.1	
Age Groups	15 Years Olds	53.20	10.3	0.08	43.65	16.5	0.002
	16 Years Olds	47.78	9.1		34.90	14.9	
	17 Years Olds	44.50	8.2		39.21	14.7	
	18 Years Olds	44.05	8.0		37.52	12.9	
	19 Years old	45.10	9.2		47.01	18.6	
Mothers Education	Academic	46.30	8.7	0.64	40.00	14.4	0.94
	Non-academic	44.81	8.1		38.81	14.8	
Fathers Education	Academic	47.12	8.6	0.84	38.56	14.4	0.54
	Non-academic	44.30	8.3		39.00	14.1	
Mothers Remarriage	Yes	40.84	9.6	0.7	48.80	15.6	0.8
	No	45.01	8.4		38.41	14.5	
Fathers Remarriage	Yes	42.32	10.7	0.06	42.00	15.3	0.4
	No	45.13	8.3		38.33	14.5	
Mothers Health	Healthy	45.20	8.6	0.016	38.32	14.6	0.43
	Disabled	38.71	7.7		46.00	17.1	
	Chronic	42.7	6.1		39.5	13.7	
Fathers Health	Healthy	45.5	8.3	0.001	38.5	14.7	0.84
	Disabled	39.1	8.7		40.1	12.2	
	Chronic	40.7	8.6		37.6	14.5	

**Table 3:** The Correlation Between the Mean Scores of Fatherhood Characteristics and Students' General Health

Variable	Mean	SD	Number	Correlation Coefficient	P value
General Health	38.56	14.6	495	-0.113	0.01
Fatherhood characteristics	44.99	9.69			

**Table 4:** The Correlation Between the Variables of Fatherhood Characteristics with Students' General Health

Variables of Fatherhood Characteristics	General Health	
	Correlation coefficient (Pearson correlation)	Significant coefficient
Socialization	0.108	0.016
Fairness	-0.153	0.001
Authority	-0.153	0.001
Incuriosity	0.196	0.001
Respectful behaviors	0.192	0.001
Consulting with their children	-0.144	0.001
Kindness	-0.159	0.001
Vulnerability	-0.181	0.001
Understanding of children need	-0.0115	0.011
Aggrieve behaviors	-0.170	0.001

appropriately. This was consistent with Bhattacharyyl et al study results.<sup>14</sup>

There were significant associations between the studied adolescents' age and gender with their general health so that the elder male students achieved a higher level of health rather than their counterparts from the same and opposite genders. This may be related to the cultural norms of a traditional society such as Iran in which the masculinity is known as a positive value leading to achieve more direct and indirect mediators leading to develop the males' health more than their female counterparts, especially in a critical period of

life such as adolescence. Some investigations revealed the opposite results in a way that no association between the adolescents' age and gender and their health status were reported.<sup>14, 15</sup>

It was also shown that students' parents' education level had an insignificant correlation with fatherhood characteristic. In other words, higher education level does not necessarily lead to carry out fatherhood responsibilities efficiently. They are supposed to spend more time over their offspring's school affairs and interact with them. Michela Sonogo et al. came to this conclusion that parental education is strongly

associated with parent-reported child mental health.<sup>16</sup> The effect of parental education among adolescents appears to be elucidated by other factors such as school,<sup>17</sup> sport,<sup>18</sup> and neighborhood.<sup>19</sup> However, different studies illustrated educated parents spend more time with their offspring rather than parents with less education.<sup>20, 21</sup>

The results of the present investigation indicated the association between the general health of the studied students and the fatherhood characteristics of their fathers. In other words, their fathers' characteristics affected their health significantly in ten aspects out of 16 dimensions. It indicated that as far as the fathers took their responsibilities towards their adolescents efficiently, it affected their general health positively. The findings of Binta Alleyne-Green et al investigation demonstrated that perceived closeness to father figures declined dating violence victimization among black youth. When separated by gender, the hypothesis for male cases was affirmed that perceived closeness with their father figures lead to a reduction in dating violence. Nevertheless, similar assumption was not supported for female respondents. Instead, perceived closeness to father figures resulted in less sexual risk behaviors for girls.<sup>22</sup> McCallops et al study showed that the parent support influenced the association between bullying and suicidal activity. Among youth experiencing homelessness with low levels of parent support, bullying was related to worse suicidal activity, while among those with high levels of parent support, bullying was not associated with worse suicidal activity.<sup>23</sup>

### Limitations

One of the limitations in the present investigation was possible inaccurate completion of questionnaires by the studied students due to their humorous manner. In some cases, they imitated or even copied each other's answers. So, it is suggested conducting a qualitative study to scrutinize this issue as precisely as possible. Disregarding the quality of fatherhood characteristics is one of the other limitations of this study. It was not, of course, possible to measure this quality because of the restriction of time that we had.

### Conclusion

The results of the present investigation indicated some correlations between fatherhood characteristics with students' health status and some of their demographic profile items. This demonstrates the fathers' role in their adolescents' health status. Furthermore, the necessity to take into account the role of fathers in educating and growing up their adolescents can be reaffirmed.

### Acknowledgment

We thank all staff of the Education Department and the schools helping the researchers conducting this study entirely. The students should also be appreciated for their cooperation during the study process. Since this project was accepted in 2013, ethical code was not received for that as a necessary item.

**Conflict of Interest:** None declared.

### References

- 1 Musacchio N, Forcier M. Adolescent health. In: Quah, SR, Heggenhougen K, editors. International encyclopedia of public health. Oxford: Academic Press, 2008:33–48.
- 2 Yeo LS, Ang RP, Chong WH, Huan VS. Gender differences in adolescent concerns and emotional well-being: perceptions of Singaporean adolescent students. *J Genet Psychol* 2007;168:63–80.
- 3 Ravens-Sieberer, U., Wille, N., Erhart, M., Nickel, J., Richter, M. Socioeconomic inequalities in mental health among adolescents in Europe. In: Social cohesion for mental well-being among adolescents. (2008) pp 26–42.
- 4 Natalia Moskvichevaa\*, Nina Bordovskaiaa, Zoya Dudchenkoa, Elena Borisova, Relationship between adolescents' and parents' life values and attitudes toward future profession, *Procedia - Social and Behavioral Sciences* 217 ( 2016 ) 160 – 168.
- 5 Jessica L. Samuelson, M.A., Young Fathers' Relationship with Their Child's Family members and Other Factors of Father's with Their Children, Alliant International University, ProQuest Dissertations Publishing, 2017. 10265814.
- 6 Rosenberg, J, & Wilcox, W. Bradford. (2006) The importance of fathers in the healthy development of children. Office on Child Abuse and Neglect, U.S. Children's, (2006).
- 7 McLeod, Branden Anthony., Factors associated with fathers' involvement with their children among Black fathers with criminal records, Morgan State University, ProQuest Dissertations Publishing, 2015. 3707688.
- 8 Ellen Alicia Morgan, Parents' Substance Abuse History, Self-Efficacy, and Involvement in The Children's Education, Published by ProQuest LLC ( 2017). Copyright of the Dissertation is held by the Author.
- 9 Patterson, J.M., , Fathering in Diverse Social Contexts, *Healthy Generations*, volume: 8, issue:2, PP:4-5.(2008).
- 10 Anna J. Markowitz and Rebecca M. Ryan, Father Absence and Adolescent Depression and Delinquency: A Comparison of Siblings Approach, *J Marriage Fam.* 2016 October ; 78(5): 1300–1314. doi:10.1111/jomf.12343.
- 11 Thomas J. Schofield, Rand D. Conger, M. Brent

- Donnellan, Rachel Jochem, Keith F. Widaman, Katherine J. Conger, Parent Personality and Positive Parenting as Predictors of Positive Adolescent Personality Development Over Time, *Merrill Palmer Q* (Wayne State University Press). 2012 April ; 58(2): 255–283. doi:10.1353/mpq.2012.0008.
- 12 Tofighi Asghar, Babaei Sulmaz, Dastah Samaneh, The Relation Between Mental Health And Physical Activity Among Nurses Working In Urumieh Hospitals, Vol. 12<sup>th</sup>, No. 1, 20016, pages 72-78.
  - 13 Michael D. Colburn, Emily Harris, Corinne Lehmann, Lea E. Widdice, and Melissa D. Klein, Adolescent Depression Curriculum Impact on Pediatric Residents' Knowledge and Confidence to Diagnose and Manage Depression, *Journal of Adolescent Health* xxx (2019) 1-7.
  - 14 Pratishtha Bhattacharyya and Rabindra Kumar Pradhan, Perceived Paternal Parenting Style and Proactive Coping Strategies of Indian Adolescents, *International Journal of Psychological Studies*; Vol. 7, No. 2; 2015.
  - 15 Seyed Ebrahim Mousavi, Wah Yun Low, Aili Hanim Hashim, Perceived Parenting Styles and Cultural Influences in Adolescent's Anxiety: A Cross-Cultural Comparison, *J Child Fam Stud* (2016) 25:2102–2110, DOI 10.1007/s10826-016-0393-x.
  - 16 Michela Sonogo, Alicia Lla'cer, In'aki Gala'n, Fernando Simo'n., The influence of parental education on child mental health in Spain, *Qual Life Res* (2013) 22:203–211, DOI 10.1007/s11136-012-0130-x.
  - 17 Goodman, E., Huang, B., Wade, T. J., & Kahn, R. S. A multilevel analysis of the relation of socioeconomic status to adolescent depressive symptoms: does school context matter? *Journal of Pediatrics*, (2003)143(4), 451–456.
  - 18 Iannotti, R. J., Janssen, I., Haug, E., Kololo, H., Annaheim, B., & Borraccino, A. Interrelationships of adolescent physical activity, screen-based sedentary behaviour, and social and psychological health. *International Journal of Public Health*, 54(Suppl 2), (2009) 191–198.
  - 19 Schneiders, J., Drukker, M., van der Ende, J., Verhulst, F. C., van Os, J., & Nicolson, N. A. Neighbourhood socioeconomic disadvantage and behavioural problems from late childhood into early adolescence. *Journal of Epidemiology and Community Health*, (2003). 57(9), 699–703.
  - 20 Chalasani, S. The changing relationship between parents' education and their time with children. *electronic International Journal of Time Use Research* 4(1):93117. Available from: <http://ideas.repec.org/a/leu/journal/2007vol4p93-117.html>. Accessed 6 June 2011.
  - 21 Guryan, J., Hurst, I., & Kearney, M. Parental education and parental time with children. *Journal of Economic Perspectives*, 22(3), (2008) 23–46.
  - 22 Binta Alleyne-Green, Claudette Grinnell-Davis, Trenette T. Clark, Qiana R. Cryer-Coupet, The role of fathers in reducing dating violence victimization and sexual risk behaviors among a national sample of Black adolescents, *Children and Youth Services Review* 55 (2015) 48–55.
  - 23 McCallops, Kathleen A., *The Relationship between Bullying, Suicidality, and Youth Homelessness: The Role of Parent Support as a Moderator*, ProQuest Dissertations Publishing, 2018.