

Father Involvement in Education Predicates the Mental Health Status of Chinese Primary School Students

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Abstract

Previous studies have shown that quality and the quantity of father involvement in education play an important role in children's development. The influence of father involvement in education on Chinese children's mental health status still needs further study. To understand the present situation of father involvement in education and its impact on children's mental health, this study will concentrate on the impact of father involvement on the mental health status of primary school students. This study surveyed 1669 primary school students in Yancheng, China. It was pointed out that 45.1% of fathers were not active in children's education, and 25.8% of fathers have not been sufficient time to accompany their children. Children's sex and grade were not associated with father involvement in education, which was linked to their father's occupation and education level. Father involvement dramatically affected primary school students' sensitive tendency and impulsive tendency. Father involvement can make children more optimistic and less focus on trifles and suspicious. More father involvement in education leads to better mental health status. These results suggest the importance of increasing father involvement in education in promoting mental health status in primary school students.

Keywords: father involvement, mental health status, primary school students, China

1. Introduction

Mental health problems are considered very common among children. Depending on Green et al 2004, about 1 in 10 children and adolescents had mental health needs in Great Britain (Green, McGinnity, Meltzer, Ford, & Goodman, 2004). In China, the prevalence of mental disorders among students aged 6-16 years was 15.24% (95 CI: 15.49-16.97%) (Qu, Jiang, Zhang, Wang, & Guo, 2015). To promote children's mental health, it is very useful to identify protective factors (Profe & Wild, 2017). As an important part of children's lives (Bernard, Whitson, & Kaufman, 2015), the involvement of fathers may protect children from depression and delinquency (Dekovic, 1999). In the traditional social division of labor, mothers were asked to take care of their children while fathers were primarily responsible for raising families. Since the 1960s, there has been a growing focus on father's involvement (Lamb, 2000). In recent decades, there has been a growing emphasis on the relationship between fathers and children, and the involvement of fathers in children's education (Thapa & Niehof, 2013). Fathers usually accompany their children through active physical engagement. These experiences can promote emotional connection (Coyle-Shepherd & Newland, 2013). Many children reported that the nurturing and emotional aspects of father involvement were significant and meaningful, even aside from the tangible experience that they shared with their fathers (Goodsell & Meldrum, 2010). It was found that high-quality father involvement has a positive effect on the development of children, such as healthier relationships, higher employment rates, and other favorable life quality. Tautolo found a significant correlation between father involvement and children's internalization and externalization (Tautolo, Schluter, & Paterson, 2015). Yoon found that higher quality of father involvement was linked to lower levels of

internalizing and externalizing behavior problems among preadolescents at risk of maltreatment(Yoon, Bellamy, Kim, & Yoon, 2018).

Father involvement in education usually includes availability, interaction, and responsibility. Availability means the presence of the father, which is based on the amount of time fathers spend with their children. Interaction refers to the direct contact between fathers and children while responsibility refers to the role of fathers in determining the needs of their children and providing them with the resources available to them(Lamb, Pleck, Charnov, & Levine, 1987). Fathers' education level, children gender and other factors are considered to have distinct influences on fathers' involvement. McConnell found a positive correlation between parental education and parent-child interaction quality (McConnell, Breitzkreuz, & Savage, 2011). Conger insisted on the unique influence of parents' level of education in family process(Conger, Conger, & Martin, 2010). As to children by gender, Pleck found that fathers were more interested in interaction with their sons(Pleck, 1997). On the contrary, Wu found that father involvement had no relationship with children's gender and age(Wu, Chen, Liu, & Xing, 2014). Quality and the quantity of father involvement in education play an important role in children's development. The amount of father-child time in educational activities was found to be associated with moderate to large improvements in children's cognitive development(Cano, Perales, & Baxter, 2019). Opondo found that positive psychological and emotional aspects of father involvement in children's early upbringing, rather than the quantity of direct involvement may protect children from depressive symptoms in their future (Opondo, Redshaw, & Quigley, 2017). Further studies have found that the quality of fathers' involvement is more important than time on children's development. (McWayne, Downer, Campos, & Harris, 2013). Therefore, this study will focus on the influence of the time and quality of father involvement on children's mental health.

In contemporary Chinese families, many fathers are increasingly aware of their important role in the growth of children(Xu & Xu, 2016). However, they usually do not have enough time with their children due to high work pressure (Rokicka, 2016). At present, it is worth for further discussion father involvement in education influence on children's mental health. Primary school students are in the critical period of physiological and psychological development, and various mental health problems are prone to occur. This study will concentrate on the impact of father involvement on the mental health status of primary school students in Yancheng, a small and medium-sized city in China. In sum, we have two hypotheses. 1. Fathers involvement is not abundant. 2. The mental health status of primary school students is closely related to their father's involvement.

2. Methods

2.1 Subjects

Institutional Review Board (IRB) of Yancheng Teachers University granted ethical approval of this study. A letter informing children's right to withdraw and confidential promise was sent to parents a week before the survey began. Implied consent was acquired if parents did not refuse their children to take part in this study. For students higher than grade 3, questionnaires were filled out by students themselves. For students in grade 3 and younger, questionnaires were filled out by parents. A total of 2400 questionnaires were distributed and 1669 valid questionnaires were received, including 723 girls and 946 boys. The number of students from grade 1 to 6 was 553,361,284,174,159 and 138 respectively. The age range is 6 to 12. The mean (M) and standard deviation (SD) is 7.63 and 1.73 separately. The number of fathers with high school, college and postgraduate education is 627, 948 and 94 respectively. The number of fathers from government institutions, public institutions, enterprise and self-employed was 127, 324, 531 and 658, respectively.

2.2 Measurements

Mental Health Test (MHT) scale was adopted by Bucheng Zhou and widely accepted to reflect individual mental health status and various anxiety issues(Wu, Qu, Wang, Tang, & Sun, 2019; Zhou, 1991). MHT had 100 items divided into 8 content scales: Learning anxiety tendency, Social anxiety tendency, Loneliness tendency, Self-accusation tendency, Sensitive tendency, physical symptoms, phobia tendency, impulsive tendency. In short, higher score means more mental health problems.

Father involvement in education included two items. The first item is about the quality of father involvement, that is, my father involvement in education is. A. Active B. Passive. The second item is about the time of father involvement in education, that is, how many times a week does your father spends more than an hour with you. A, more than 3 times B, 1-2 times C, hardly.

The highest educational level and occupation of their fathers, two indicators of social status, were also investigated.

Educational level was assessed using the following categories: High school and lower, College and University, Postgraduate and higher. Occupations were classified using the following categories: government institutions, public institutions, enterprises, self-employed.

2.3 Data Analyses

Spss16.0 statistical software was used. The data was analyzed by descriptive statistics, Chi-square test, t-test and one-way ANOVA.

3. Results

3.1 Statutes of Father Involvement

As showed in table 1, only 54.9% of fathers actively participated while still 45.1% fathers passively involved. About 74.2% of fathers can accompany with their children, while 25.8% of fathers cannot company with children usually.

Table 1. Father Involvement in Children's Education

Division	Level	Number	Percent (%)
my father involvement in education is	Active	916	54.9
	Passive	753	45.1
how many times a week does your father spends more than an hour with you	more than 3 times	493	29.5
	1-2 times	746	44.7
	hardly	430	25.8

As showed in table 2 and 3, there is no relationship between father involvement and children gender and grade. There was no significant difference in the involvement of fathers between boys and girls. There was no significant difference in the degree of father participation between different grades. The degree of father involvement was significantly related to the fathers' occupation and educational level. Compared with their counterpart, those fathers with low degree of education and self-employed tend to be less likely to accompany their children and passively participate in children's education.

Table 2. Factors That Influenced the Quantity of Father Involvement

Factors	Level	how many times a week does your father spends more than an hour with you		
		more than 3 times (N=493)	1-2 times (N=924)	hardly (N=555)
Child gender	Girl	201(27.8%)	331(45.8%)	191(26.4%)
	Boy	292(30.9%)	415(43.9%)	239(25.3%)
Grade	Chi-square	1.85		
	1	174(31.3%)	248(44.6%)	134(24.1%)
	2	101(27.9%)	153(42.3%)	108(29.8%)
	3	88(31.4%)	120(42.9%)	72(25.7%)
	4	46(26.6%)	82(47.4%)	45(26.0%)
	5	46(28.8%)	76(47.5%)	38(23.8%)
	6	38(27.5%)	67(48.6%)	33(23.9%)
Education level of father	Chi-square	7.05		
	≤High school	145(23.1%)	263(41.9%)	219(34.9%)
	College	31(32.7%)	438(46.2%)	200(21.1%)
	≥ Postgraduate	38(40.4%)	45(47.9%)	11(11.7%)
Occupation of father	Chi-square	53.13***		
	Government institutions	54(42.5%)	55(43.3%)	18(14.2%)
	Public institutions	109(33.6%)	153(47.2%)	62(19.1%)
	Enterprise	182(34.3%)	244(46.0%)	105(19.8%)
	Self-employed	145(22.0%)	284(43.2%)	229(34.8%)
	Chi-square	67.40***		

*** $p < 0.001$

Table 3. Factors That Influenced the Quality of Father Involvement

Factors	Level	my father involvement in education	
		Active	Passive
Child gender	Girl	405(56.0%)	318(44.0%)
	Boy	511(54.0%)	435(46.0%)
Grade	Chi-square	0.66	
	1	297(53.4%)	259(46.6%)
	2	190(52.5%)	172(47.5%)
	3	156(55.7%)	124(44.3%)
	4	91(52.6%)	82(47.4%)
	5	96(60.0%)	64(40.0%)
	6	86(62.3%)	52(37.7%)
	Chi-square	6.53	
Education level of father	≤High school	313(49.9%)	314(50.1%)
	College	541(57.1%)	407(42.9%)
	≥ Postgraduate	62(66.0%)	32(34.0%)
	Chi-square	12.71**	
Occupation of father	Government institutions	88 (69.3%)	39(30.7%)
	Public institutions	191(59.0%)	133(41.0%)
	Enterprise	326(61.4%)	205(38.6%)
	Self-employed	299(45.4%)	359(54.6%)
	Chi-square	45.60***	

*** $p < 0.001$; ** $p < 0.01$

3.2 Father Involvement and Children 'Mental Health

The mental health subscale of primary school students was tested according to the quality of father involvement. We divided the quality of father involvement into active and passive. T-test was used to compare the MHT score of students with active father involvement and those with passive father involvement. As showed in Table 4, there were statistically significant differences ($p < 0.05$) between the two types of students in Sensitive tendency and impulsive tendency, and the students with passive father involvement scored higher than the other students.

The mental health subscale of primary school students was tested according to the time of father involvement. We divided the time of father involvement into three types, including more than 3 times, 1-2 times and hardly F-test was used to compare the MHT score of students with three types of father involvement. As showed in Table 5, there were statistically significant differences ($p < 0.05$) among three types of students in impulsive tendency, LSD test showed that impulsive tendency were significantly higher in "hardly" group than other groups. Students with fewer fathers accompany had significant highest impulsive tendency.

Table 4. The Effect of the Quality of Father Involvement on Children's Mental Health

	my father involvement in educationis		t
	Active(N=916)	Passive(N=753)	
Total	29.64±12.39	30.68±11.90	1.73
Learning anxiety tendency	6.77±2.99	6.90±3.04	0.88
Social anxiety tendency	3.66±1.98	3.79±1.90	1.32
Loneliness tendency	1.45±1.70	1.51±1.79	0.72
Self-accusation tendency	4.82±2.45	4.92±2.28	0.81
Sensitive tendency	4.76±2.20	4.98±2.19	2.05*
Physical symptoms	3.66±2.16	3.78±2.16	1.10
Phobia tendency	2.99±2.43	3.07±2.41	0.71
Impulsive tendency	1.55±1.83	1.75±1.89	2.17*

Table 5. The Effect of the Quantity of Father Involvement on Child's Mental Health

	how many times a week does your father spends more than an hour with you			F	LSD
	more than 3 times a (N=493)	1-2 times b (N=924)	hardly c (N=555)		
Total	30.12±12.60	29.54±12.00	31.09±11.96	2.20	
Learning anxiety tendency	6.84±3.06	6.74±2.94	6.96±3.07	0.71	
Social anxiety tendency	3.71±2.02	3.68±1.93	3.79±1.87	0.45	
Loneliness tendency	1.46±1.72	1.43±1.75	1.56±1.76	0.71	
Self-accusation tendency	4.92±2.45	4.79±2.35	4.92±2.34	0.61	
Sensitive tendency	4.81±2.20	4.78±2.21	5.04±2.16	1.98	
Physical symptoms	3.76±2.27	3.60±2.05	3.86±2.22	2.18	
Phobia tendency	3.02±2.41	2.97±2.43	3.12±2.43	0.49	
Impulsive tendency	1.59±1.85	1.55±1.79	1.86±1.98	4.01*	a ,b<c

4. Discussion

4.1 Current Situations of Father Involvement

More than 54% of fathers actively participated in children's education, while nearly half of the fathers are passive in the children's education. Therefore, the first hypotheses that fathers involvement is not abundant is confirmed. The results are consistent with previous studies. In a survey of more than 10, 000 parents of primary and secondary school students, All-China Women's Federation(ACWF) found that nearly half of fathers in their families were absent from their children's education(Wang, 2015). In contemporary society, most fathers are not only responsible for raising the family, they also need to spend more time with their children.

There was no significant relationship between the degree of father involvement and the gender and grade of children. This conclusion is inconsistent with a previous study in the United States. Age and gender composition of the children were found to be related to father involvement and fathers in the United States were more involved in boys and older children(Hofferth & Anderson, 2003; Raley & Bianchi, 2006). However, our research conclusions are consistent with Wu's the findings in China (Wu et al., 2014). It may be related to the impact of family planning policy in China. Most families have only one child, and many fathers give equal attention and care to both boys and girls.(Chen, Dai, Cehn, & Yang, 2015)

Education level and occupation of fathers had a significant impact on father involvement. It is in line with previous studies(Wu et al., 2014). First, highly educated fathers can provide more resources for their children, especially in activities that require more knowledge and academic support. Low education is usually linked with low earnings, which are to some extent a barrier to fathers' involvement with their child(Guarin & Meyer, 2018). Second, highly educated fathers are likely to go beyond the traditional division of labor between men and women and may invest more time and energy in children's education(Y. Xu, Ji, & Zhang, 2006).

McGill found that fathers' occupation was not related to father involvement(McGill, 2014). Nevertheless, Torres found that father involvement was related to the occupational status of both parents(Torres, Verissimo, Monteiro, Ribeiro, & Santos, 2014).Our results support the latter. This is partly because self-employed fathers have less regular working hours and are more stressed than those in government or public institutions. Fathers in government or public institutions are able to be more involved in their children's work due to having more control over their work schedules(Marsiglio, 1991).

4.2 Primary School Students' Mental Health and Fathers Involvement

There is a big difference between active and passive father involvement when it comes to children's allergies tendency. When father involvement is passive, children tend to worry about small things. Therefore, the second hypotheses that mental health status of primary school students is closely related to their father's involvement in education is also confirmed. Previous studies also found that the role of father is very important in the formation of the children's healthy state of mind(Jin & Lan, 2014).

Father involvement can make children more optimistic and less focus on trifles and suspicious. As far as impulsive tendency are concerned, father involvement helps children more stable and peaceful, less impulsive or violent. When mothers are with their child, they often act as a caregiver. One of their most important jobs is to make sure their children are well fed, well dressed, and so on. As a result, mothers often engage in quiet activities with their children. In contrast, fathers like to play games requiring physical strength and movement, such as tickling, lifting, hiding and

seeking, catching and so on. As a result, children experience a wide range of emotions while playing with their father, such as feeling "wow, so nervous, so scared, so fun." At the same time, children also learn a lot of emotional experience and interpersonal skills, which are very helpful for children's future interpersonal communication.

In conclusion, the higher level of father involvement, the stronger their children's psychological adaptability and the better mental health. If the child does not have the active father involvement during the growth process, it is easy to lead to the child's personality and emotional defects. Fathers with lower education and self-employment are likely to spend less time with their children and be more passive in their company. Strategies should be taken to raise their awareness.

5. Practical Implication and limitations

Family education calls for the participation of father. Fathers, especially those who are less educated or self-employed in small and medium-sized city in China, should learn to express love correctly, and spend more time with children.

Parent-training program is found helpful in increasing parenting skills and reducing children's negative behaviors (Vazquez, Cruz Molina, Ramos, & Artazcoz, 2019). The effectiveness of online parenting program has also been confirmed by some studies (Toombs, Unruh, & McGrath, 2018). It is recommended that these effective programs be incorporated into the training projects to enhance involvement of fathers, especially those with low education level and self-employed. More effective ways to encourage more father involvement in children's education are needed in future studies.

This study had some limitations. First, self-reported data was used in this study, which may be influenced by individual subjective evaluation and external background factors. High-quality scales should be used to objectively measure father involvement in education in future studies. Second, parents fill out some questionnaires, which may affect the homogeneity of data. Third, lack of control over other factors may affect the relationship between father involvement and their children's mental health.

6. Conclusions

Based on surveys from 1669 primary school students, this study focused on the impact of father involvement on the mental health status of primary school students. It was found that 45.1% of fathers were not active in children's education, and 25.8% of fathers have not been sufficient time to accompany their children. Father involvement in education was linked to father's occupation and education level. Father involvement dramatically affected primary school students' sensitive tendency and impulsive tendency. Father involvement can make children more optimistic and less focus on trifles and suspicious. More father involvement in education leads to better mental health status. These results suggest the importance of increasing father involvement in education in promoting mental health status in primary school students.

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