

Original Paper

Effects of the Mother-father Relationship on Loneliness in Late Adolescence: Mediating Roles of Social Skills and Social Support

Yoshiharu FUKUOKA ^{*1}

(Accepted June 11, 2018)

Key words: mother-father relationship, late adolescence, loneliness, social support in friendship, social skills

Abstract

Parents play important roles in the development of their children. Especially, the mother-father relationship is known to have significant effects on development. Previous studies have often focused on negative effects of marital disputes on children. This study focused on the positive effects of positive mother-father relationships based on the assumption that a good mother-father relationship improves children's social skills and reduces loneliness, mediated by self-esteem and social support exchanges with friends. A questionnaire survey was conducted with university students, and correlations were examined by analyzing the data of 244 participants (104 men and 140 women). Results indicated significant gender differences in mean values of certain variables, especially social support. Therefore, the gender differences in correlations among variables were further examined. The results of path analysis were consistent with the assumption that good mother-father relationships are correlated with high social skills, and high social skills are correlated with more possibilities of social support exchanges with friends, as well as high self-esteem in both sexes. Moreover, high social support and self-esteem were related to reduced loneliness. The correlation between good mother-father relationships and high social skills were interpreted as the effect of modeling parental behaviors. On the other hand, mother-father relationships were directly correlated with self-esteem only in female university students, which might be caused by the relatively stronger emotional ties between daughters and their parents during the development of interpersonal relationships in adolescence, compared to sons.

1. Introduction

Children are highly affected by their parents during the process of development. Family problems have often been indicated in the background of children's problem behaviors. For children, the family is the basis of development, and they expand their behavioral range to society based on the foundation of their family¹⁾. Children's social adaptation is inhibited when family relationships are unstable.

One aspect of family relationships that affect children is the mother-father relationship. Children's psychological stability is threatened when this relationship is bad. Not only the father-child and mother-child

^{*1} Department of Clinical Psychology, Faculty of Health and Welfare,
Kawasaki University of Medical Welfare, Kurashiki, 701-0193, Japan
E-Mail: fukuoka@mw.kawasaki-m.ac.jp

relationship, but also the effects of relationships among family members should be taken into consideration²⁾. On the other hand, the positive aspects of mother-father relationships also affect children. Grych and Fincham³⁾ indicated that children's interpersonal skills and social coping skills are improved by observing positive problem-solving models shown by parents when they skillfully resolve conflicts between them. As suggested by Grych and Fincham³⁾, this is a process of observational learning. There are some previous studies^{4,6)} in Japan that examined the effects of good mother-father relationships on children's mental health. Takahashi⁴⁾ reported that love between a couple defines children's mental health, mediated by the affinity for parents. Utsunomiya⁵⁾ reported that commitment to the marital partner affected children's self-esteem and the sense of fulfillment in adolescent women. Oshima⁶⁾ indicated that trust between a couple affected interactions between parents and children and children's mental health.

The present study examined correlations between mother-father relationships and children's loneliness in university students. Loneliness is a negative feeling that is produced when the desire for interactions with others is not fulfilled in real life^{7,8)}. Loneliness is often used as an index related to mental illness. Not only is loneliness itself distressful, but when it continues, it can also cause depression and apathy⁹⁾. Moreover, recently, its negative effects on immune functions have been indicated¹⁰⁾.

In this study, certain parameters were assumed in correlations between mother-father relationships and loneliness. Previous studies have indicated that loneliness in university students is strongly affected by their relationships with friends¹¹⁾ and that it was related to low social support from friends¹²⁾. It has also been indicated that getting appropriate social support is affected by a person's level of social skills^{13,14)}. Following Grych and Fincham³⁾ and Utsunomiya⁵⁾, it was assumed that the mother-father relationship would affect children's social skills and self-esteem. Self-esteem is one variable that is expected to increase through social skill training (e.g., Adachi and Sadahisa¹⁵⁾), and it is supposed to increase by desirable interpersonal experiences of appropriately using social skills.

Based on the above considerations, this study assumed that a good mother-father relationship would improve social skills and reduce loneliness, mediated by high self-esteem and high possibilities of social support exchanges, and examined correlations among the variables.

2. Methods

2.1 Participants

Late adolescent Japanese university students participated in this study. 244 students completed the questionnaire without any missing values (104 men and 140 women, mean age 20.25 years, SD=1.03).

2.2 Assessment

2.2.1 Mother-father relationships

The scale developed by Takahashi⁴⁾ consisting of 15 items including 8 items of "love between the couple" (e.g., the father seems lonely without the mother) and 7 items of "conflict resolution" (e.g., when the father and mother disagree with each other, they insist on their own opinions; a reversed item) was used. Participants responded to each item using a four-point scale ranging from 4 (*Very true*) to 1 (*Not at all true*). The results of the present study also indicated a two-factor structure. However, the inter-factor correlation using oblique solution was 0.54, which was rather high. Therefore, the total score of the two factors was regarded as the index.

2.2.2 Social skills

Kiss-18 consisting of 18 items developed by Kikuchi^{16,17)} was used. Examples of the items include: "I can keep a conversation going when talking with others," and "I can introduce myself well when meeting a person for the first time," among others. Participants responded using a five-point scale ranging from 1 (*Never*) to 5 (*Always*) following the original version. The total score of all the items was used as an index after confirming that the loading of the first principal component was sufficiently large.

2.2.3 Self-esteem

The Japanese version¹⁸⁾ of the Self-Esteem Scale consisting of 10 items, originally developed by Rosenberg¹⁹⁾ was used. Participants responded using a five-point scale ranging from 5 (*True*) to 1 (*Not true*). Following the previous studies, the total score of all the items was regarded as the index.

2.2.4 Exchanges of social support with friends

The Scale for Assessing the Possibility of Getting and Providing Social Support developed by Fukuoka²⁰⁾ was used. It consists of 8 items each for getting and providing. An example of the possibility of getting support includes: "When I cannot decide what to do, my friend will advise me." The possibility of providing support was described as a person's action taken on behalf of a friend. Participants were asked about their current close friends, and they responded using a five-point scale ranging from 5 (Yes) to 1 (No). The correlation between the possibility of getting and providing social support was higher than 0.70. Therefore, the total score of the two possibilities was regarded as the score of social support exchanges.

2.2.5 Loneliness

The Japanese version²¹⁾ of the revised UCLA Loneliness Scale²²⁾ consisting of 20 items was used. Examples of the items include: "I feel in tune with the people around me," and "I do not feel alone (a reversed item)," among others. Participants responded using a the four-point scale ranging from 4 (*Often*) to 1 (*Never*). The total score of all the items was calculated after confirming that the loading of the first principal component was sufficiently large.

2.2.6 Personal attributes

Respondents were asked about their school years, age, sex, the number of siblings including themselves, and residence status.

2.3 Procedures

The survey was conducted during school guidance in the fall term, or at the end of classes in two universities. The purposes of the survey were explained to the students after obtaining the class-teachers' approval. Students that consented to participate in the study anonymously responded to the scales.

2.4 Ethical considerations

The participants were told that their participation was completely voluntary, and no disadvantages would befall them for not responding, that the survey is anonymous and that the data would be aggregated when conducting statistical analyses and would not be used for any other purposes. Furthermore, participants were told to respond to the questions and return the questionnaire only after they gave their consent to participate. The institutional review board at the author's affiliated department and the dean of the department approved the present study.

3. Results

3.1 Descriptive statistics and differences depending on basic attributes

A t-test was conducted on gender (male/female), residence (one's own home/outside the home), and

Table 1 Mean value of each variable and sex differences

Variables	Male		Female		t-value
	Mean	SD	Mean	SD	
Mother-father relationships	33.14	8.64	30.45	8.60	2.41 *
Social skills	55.74	11.76	54.69	11.55	0.70
Self-esteem	30.57	7.72	28.93	6.64	1.78 +
Social support exchange	54.92	9.62	58.87	8.50	-3.39 ***
Loneliness	41.51	8.67	38.97	9.46	2.15 *

+p<.10 *p<.05 ***p<.001

school years (the 1st and 2nd years/the 3rd and 4th years). Correlation coefficients were calculated regarding age, and the number of siblings. Significant or marginally significant gender differences were shown for four variables excluding social skills. These results are shown in Table 1. Especially, the gender differences were significant for social support (males<females). In addition, a weak, positive correlation was shown between the number of siblings and good mother-father relationships, as well as social skills ($r=.14$, $p<.05$, respectively). There were no significant correlations among the other variables.

3.2 Correlations among variables

Considering significant gender differences in the effects of personal attributes, especially social support, correlation coefficients were calculated separately by gender (Table 2). The results indicated significant correlations between mother-father relationships and social skills as well as self-esteem in both sexes, which were stronger in women compared to men. Correlations between mother-father relationships and social support exchanges as well as loneliness were not significant in men and relatively weak in women. Both sexes indicated a clear positive correlation between social skills and social support exchanges, as well as a clear negative correlation between these variables and loneliness. Self-esteem also had a negative correlation with loneliness. The correlation between self-esteem and social support exchanges was relatively weak, and there was no correlation in women.

Table 2 Correlations among variables (upper right: males, lower left: females)

Variables	1)	2)	3)	4)	5)
1) Mother-father relationships		.23 *	.24 *	.08	-.18 +
2) Social skills	.35 ***		.42 ***	.59 ***	-.46 ***
3) Self-esteem	.31 ***	.49 ***		.26 **	-.51 ***
4) Social support exchange	.17 *	.36 ***	.06		-.54 ***
5) Loneliness	-.28 ***	-.42 ***	-.38 ***	-.66 ***	

+ $p<.10$ * $p<.05$ ** $p<.01$ *** $p<.001$

3.3 Path analysis

Based on the results of correlation analysis, path analysis was conducted in males and in females on the assumption that "good mother-father relationships would improve children's social skills, which are correlated with adequate social support and self-esteem, which leads to less loneliness" (Figure 1). The results indicated that good mother-father relationships improved social skills in both sexes, and high social skills resulted in increased social support exchanges and high self-esteem, which were related to low loneliness. The direct effect of social skills on loneliness was not significant. Effects of mother-father relationships on men were relatively weak, compared to women. On the other hand, the connection between social skills and support exchanges was relatively strong in men. In women, mother-father relationships had a weak correlation with self-esteem, and support exchanges were significantly correlated with loneliness more than self-esteem.

4. Discussion

As predicted, a good mother-father relationship was correlated with reduced loneliness, which was mediated by social skills, exchanges of social support, and self-esteem. University students of both sexes had higher self-esteem and more frequent social exchanges with friends when they perceived that the mother-father relationship was better. Moreover, both high self-esteem and many possibilities for social support exchanges were connected with low loneliness.

As described in the Introduction regarding the effects of good mother-father relationships on children's social skills, Grych and Fincham³⁾ suggested that parents become positive role models for children through

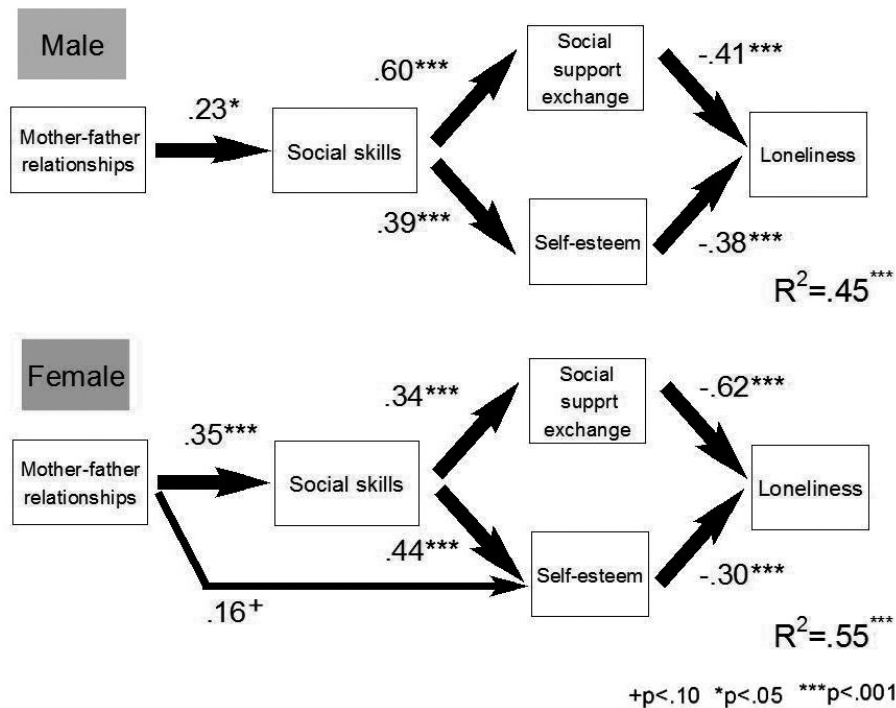


Figure 1 Results of path analysis

observational learning. Previous studies on social skills have mainly indicated correlations between parental attitudes towards child-rearing and children's social skills. For example, Togasaki and Sakano²³⁾ reported that an attitude of denial by mothers for child-rearing prevented children from acquiring social skills. Here, effects of child-rearing attitudes on children's social skills are produced by parents' direct approach to children, which could be considered as operant conditioned learning. On the other hand, the good mother-father relationship is not a direct approach to children by the parents, but which is perceived by children through observing parents' mutual interactions. Here, parents are regarded as role models for children that indirectly contribute to children's acquisition and development of social skills. Previous studies have also indicated correlations between parents' social skills and children's social skills (e.g., Dohno et al.²⁴⁾). In this case, parents' social skills are demonstrated in various interpersonal relationships, including relationships with children. Effects of good mother-father relationships that were investigated in the present study are considered a more indirect modeling effect because parents' social skills are demonstrated within the relationship with the partner and not in the relationships with children.

Such indirect effects might also be reflected in sex differences indicated through this study. Significant sex differences, especially in social support, have been reported in preceding studies and have been reviewed by Vaux²⁵⁾. Similar differences were also found in the present study. Therefore, correlations among variables were examined depending on the gender. As shown in Figure 1, good mother-father relationships directly affected the self-esteem of female students (though it was marginally significant at the 10% level), which was not mediated by social skills. This suggests that good mother-father relationships might be one basis of self-evaluation ("I am good enough") assessed by using the Rosenberg Self-Esteem Scale¹⁹⁾. Recently, parent-child relationships in adolescence have been discussed not only from the perspective of "becoming independent from parents" but also from the perspective of "autonomy based on attachment"²⁶⁾, although there is a certain level of sex difference. Matsui²⁷⁾ indicated a decline in the effects of parents on Japanese adolescent boys, from their junior high school days to undergraduate days. Emotional ties with parents are also maintained in late adolescence, and girls are considered to have stronger ties with their parents than boys. As shown in Figure 1, the connection between good mother-father relationships and social skills are

slightly stronger in women ($\beta = .35$, $p < .001$) than in men ($\beta = .23$, $p < .05$), which might reflect the gender differences described above.

This study did not obtain direct information about mother-child or father-child relationships. Oshima⁶ examined correlations between marital relationships and children's psychological health and reported that supportive interactions by the father or the mother contributed to children's psychological health. The present study showed that a good mother-father relationship was correlated with children's social skills, which according to previous studies was interpreted as the outcome of modeling. However, it might be possible that direct effects of the interactions between parents and children exceed the effects of indirect modeling. In the future, more information about mother-child or father-child relationships should be collected, and their effects should be analyzed by examining the mechanism of the effects of good mother-father relationships on children.

Conflict of interest

The author has declared that there is no conflict of interest with the findings of this study.

Acknowledgments

Asuka Takagaki at the Kawasaki University of Medical Welfare (graduated in March 2014) was a co-investigator of the present study. I would like to thank Professors Arata Sasaki, Miho Hatanaka and other experts as well as the participants in the survey for their cooperation in administration of this research.

Note

This manuscript is based on a presentation at the 65th annual meeting of the Okayama Psychological Association.

References

1. Sugitani K : Family functioning. In Ujihara H, Higashiyama H, Murase K and Yamanaka Y eds, *Encyclopedia of Clinical Psychology*, Baifukan, Tokyo, 1201-1204, 1992. (In Japanese, translated by the author of this article)
2. Maejima K and Oguchi T : The effect of marital discord on children's self-esteem, emotionality, and aggression. *The Japanese Journal of Family Psychology*, **15**(1), 45-56, 2001. (In Japanese with English abstract)
3. Grych JH and Fincham FD : Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin*, **108**(2), 267-290, 1990.
4. Takahashi N : The correlation among interparental and parent-child relationships and child's mental health. *The Japanese Journal of Family Psychology*, **12**(2), 109-123, 1998. (In Japanese with English abstract)
5. Utsunomiya H : Perceived interparental commitment and self-affirmation in female adolescents. *The Japanese Journal of Health Psychology*, **17**(2), 1-10. (In Japanese with English abstract)
6. Oshima K : Parents' marital trust, positive parenting, and young adults' mental health. *The Japanese Journal of Developmental Psychology*, **24**(1), 55-65. (In Japanese with English abstract)
7. Louise H : Loneliness. In Baumeister RF and Kathleen DV eds., *Encyclopedia of Social Psychology*. Vol. 2, SAGE Publications, Thousand Oaks, 532-534, 2007.
8. Peplau LA and Perlman D eds : *Loneliness: A sourcebook of current theory, research, and therapy*. Wiley, New York, 1982.
9. Sugawara K : Loneliness. In Shimoyama H eds, *Seishin encyclopediy of psychology*. New ed, Seishin Shobo, Tokyo, 343, 2014. (In Japanese, translated by the author of this article)
10. Louise CH and Cacioppo JT : Loneliness. In Reis HT and Sprecher S eds, *Encyclopedia of human relationships*. Vol. 2, SAGE Publications, Thousand Oaks, 985-990, 2009.
11. Cutrona CE and Peplau LA : A longitudinal study of loneliness. Presentation of the Annual meeting of the Western Psychological Association, San Diego, 1982. (Cited from Peplau LA and Perlman D eds, 1982)
12. Fukuoka Y and Hashimoto T : Measurement of perceived availability of social support based on specific

- relationships. *The Japanese Journal of Health Psychology*, 5(2), 32-39, 1992. (In Japanese with English abstract)
13. Segrin C : The relationship between social skills deficits and psychosocial problems: A test of a vulnerability model. *Communication Research*, 23(4), 425-450, 1996.
 14. Segrin C, Mcnelis M and Swiatkowski P : Social skills, social support, and psychological distress: A test of the social skills deficit vulnerability model. *Human Communication Research*, 42(1), 122-137, 2016.
 15. Adachi F and Sakuda M : The effect that social skill training enforcement gives to class adaptation and good enough. *The Journal of School Education, Bulletin of the Center for School Education Research, Hyogo University for Teacher Education*, 28, 45-53, 2015.
 16. Kikuchi A : *Science of sympathy*. Kawashima Shoten, Tokyo, 1988. (In Japanese, translated by the author of this article)
 17. Kikuchi A : *Measurement of social skills: A handbook of Kiss-18*. Kawashima Shoten, Tokyo, 2007. (In Japanese, translated by the author of this article)
 18. Yamamoto Y, Matsui Y and Yamanari Y : Structures of the perceived aspects of the self. *The Japanese Journal of Educational Psychology*, 30(1), 64-68, 1982. (In Japanese, translated by the author of this article)
 19. Rosenberg M : *Society and the adolescent self-image*. Princeton University Press, Princeton, 1965.
 20. Fukuoka Y : Effects of supportive interactions with close friends in daily stressful situations on mood states. *Annual Report of University of Shizuoka, Hamamatsu College*, 14(3), 1-19, 2000. (In Japanese)
 21. Kudoh T and Nishikawa M : A study of the feeling of loneliness (1): The reliability and validity of the revised UCLA Loneliness Scale. *The Japanese Journal of Experimental Social Psychology*, 22(2), 99-108, 1983. (In Japanese with English abstract)
 22. Russell D, Peplau LA and Cutrona CE : The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39(3), 472-480, 1980.
 23. Togasaki Y and Sakano Y : Effects of mother's attitude for child rearing on social skills and school adaptation in elementary school children: From the point of view of the attitude for child rearing of active refusal type. *The Japanese Journal of Educational Psychology*, 45(2), 173-182, 1997. (In Japanese with English abstract)
 24. Dohno K, Habano J and Hou GF : The development of social skills in university students: On the basis of parents' social skill patterns and their power-relationship. *The Journal of the Graduate School of Letters, Yasuda Women's University, Department of Education Issue*, 6, 81-96, 2000. (In Japanese)
 25. Vaux A : Variations in social support associated with gender, ethnicity, and age. *Journal of Social Issues*, 41(1), 89-110, 1985.
 26. Santrock JW : *Adolescence*. 14th ed, McGraw-Hill, Boston, 2012.
 27. Matsui Y : From independence from parents to development of close relationships with the opposite sex. In Saito S eds, *Human relationships in adolescence (Developmental psychology of human relationships 4)*, Baifukan, Tokyo, 19-54, 1996. (In Japanese, translated by the author of this article)

