Short Report

Mediating Effect of Perceived Social Support on the Correlation between the Past Parent-child Relationships and Psychological Well-being in Late Adolescence

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Abstract

This study investigated the associations among the past parent-child relationships and the present availability of perceived social support from parents and friends, and psychological well-being in late adolescence. University students (N = 202) responded to a questionnaire. Path analysis revealed associations between the past parent-child relationships and the present parental support, between the parental support and friends' support, and between the friends' support and psychological well-being. There was no direct effect of past parent-child relationships on the present friends' support. Moreover, parental support functioned as a mediator between past parent-child relationships and the present support from friends. These results suggest that past parent-child relationships affected present social support, especially psychological well-being in late adolescence, which was mediated by friends' support.

1. Introduction

People desire to be physically and mentally healthy. Especially, psychological well-being is important in our present stressful society. The Certified Psychologist Law enacted in September 2017 aims to contribute to maintaining and improving the psychological well-being of Japanese people. This reflects the social demand for psychological well-being.

The concept of "attachment," which was suggested by Bowlby, is a psychological concept representing developmental and interpersonal factors that are closely related to psychological well-being. This concept has resulted in different considerations about parent-child as well as lifelong relationships[1]. The concept of attachment has also been applied from infancy to adulthood[2]. The basic thesis of attachment is that a stable relationship with a caregiver or a similar person from the early stage of life functions as a safe shelter or a base of relief, which enables proactive exploration of the outer world. This concept has also been introduced to clinical practice[3].

Based on the theory of attachment, this study considered correlations between the recognition of parent-child relationships in childhood and the availability of social support from parents and friends for university

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students in their late adolescence. Social support is a concept that has been focused on since the mid-1970s from the perspective of the correlation with psychological well-being. It has been widely indicated that social support has direct and indirect effects on psychological well-being by reducing stress[4-6]. Especially, perceived support, which represents the availability of support, is regarded as an important variable in maintaining psychological well-being.

The importance of past parent-child relationships on social support in adolescence has been suggested by previous studies on the correlation between parenting attitudes and perceived social support[7]. Moreover, studies on attachment have also provided relevant findings. For example, Kitajima[8] suggested that attachment is an action for obtaining emotional support and reducing anxiety, and stable attachment relationships are the bases of future independence, leading to stable relationships outside the family. This idea was based on Bowlby[9], who suggested the importance of "the ability to rely on others" on independence in adolescence. Moreover, Ando and Endo[10] indicated that relationships with friends and the opposite sex develop from childhood to adolescence based on attachment relationships with parents, and children tend to come to prefer relationships with friends and the opposite sex to those with their parents.

This study examined how parent-child relationships in childhood are correlated with perceived social support of university students during their late adolescence. Moreover, correlations with their psychological well-being were examined from the perspective of developmental changes suggested by Santrock[11]. These changes included important interpersonal relationships in adolescence that extend family relationships, and relationships with friends that become more important than those with parents, although relationships with parents are maintained.

A basic conceptual model was developed based on the above discussion. In this model, childhood relationships with parents of university students in their late adolescence result in increased availability of social support from parents, which forms the basis for social support from friends and helps determine psychological well-being. Correlations among these variables were examined in this study.

2. Methods

2.1 Participants

University students (N = 226) participated in the survey. Valid responses were collected from 202 participants (62 boys and 140 girls). Their mean age was 18.99 years (SD=0.82). Most of the respondents were first- or second-year university students.

2.2 Measurements

The following contents were included in the questionnaire: Here, "parents" were defined as fathers and mothers. When either the father or the mother was not present or both, or, when conditions between fathers and mothers were significantly different, participants were requested to answer about "the person that had been most involved in the respondent's upbringing."

2.2.1 Parent-child relationships in childhood

Parent-child relationships in childhood were assessed using the "Scale developed by Sato"[12]. This scale comprised three factors, including "distrust/rejection," "relief/dependence," and "separation anxiety." From these 12 items, (four items from each) in total having a higher loading factor, were selected after considering the burden on the respondents. Participants were required to respond using a five-point scale (very true, true, neutral, untrue, and very untrue) by recalling their childhood memories before graduation from elementary school. In the scale, "distrust/rejection" represents a distrust of parents or a desire to reject one's parents, "relief/dependence" represents the tendency to rely on parents with relief, and "separation anxiety" represents the anxiety of separating from parents. These indices reflect the characteristics of parent-child relationships in the past and not the present relationships with the attachment objects.

2.2.2 Perceived social support from family and friends

Perceived social support was assessed using the scale developed by Fukuoka and Hashimoto[13], which consists of 12 items: 6 items of emotional support and 6 items of instrumental support. The former includes

comfort and encouragement, among others, and the latter includes the provision of money and activities that are helpful for solving problems. Respondents were required to respond using a five-point scale (never, not so much, to some extent, often, and very often). The same items were used for both parents and friends. These indices represent the present availability of social support from parents and friends.

2.2.3 Psychological well-being

Psychological well-being was assessed using the Japanese version of the World Health Organization-Five Well-Being Index (WHO-5-J)[14]. It is composed of five items that are evaluated using a six-point scale (all the time, most of the time, more than half of the time, less than half of the time, some of the time, and at no time). Participants responded about their condition during the past two weeks. These indices facilitated quickly detecting the conditions of psychological well-being when responding.

2.2.4 Personal attributes

Participants were required to respond regarding their school year, age, gender, and residence status. Moreover, a supplementary question required them to choose one from "parents," "mother," "father," or "others," regarding whom in their responses they responded as the "parents" that provided attachment and perceived support.

2.3 Procedures

The survey was conducted at the end of classes at X University. After obtaining the teachers' approval, the purpose of the survey was explained to students. Those that gave their consent participated in the study. All the responses were anonymous.

2.4 Ethical considerations

The participants were informed that their participation was completely voluntary and that they would not face any disadvantage as a result of not participating in the study. They were also told that the survey was anonymous and that 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 if they consented to participate in the study. This study was conducted following the rules of the first author's affiliated department, i.e. based on the "Ethical policies on graduate research" developed by the department in conformity with the Code of Ethics and Conduct (Ver.3) of the Japanese Psychological Association[15].

3. Results

3.1 Scale construction

3.1.1 Parent-child relationships in childhood

Factor analysis was conducted following Sato[12] to examine whether the three-factor structure that was identical to the original scale could be reproduced. The results were nearly identical to those of Sato[12]. However, the attribution of two items was not clear. Therefore, these two items were excluded and reanalyzed, and a three-factor structure of the scale was confirmed (Table 1). Cronbach's coefficient alpha of the scale was within 0.73-0.80.

3.1.2 Perceived social support from parents and friends

Factor analyses were conducted on support from parents and support from friends respectively, which indicated a relatively clear two-factor structure (emotional and instrumental) of both types of support. However, attribution of certain items was unstable, the factor loading of both factors was high, and the correlation between factors was also high. Therefore, the total score of each support was used after confirming that all the loadings of the first principal component were over 0.50 (Table 2). Cronbach's coefficient alpha was over 0.90 for both support from parents and support from friends.

3.1.3 Psychological well-being

A one-factor structure was shown that indicated for psychological well-being. Cronbach's coefficient alpha was 0.85, which was sufficiently high. Therefore, the total score of the five items was regarded as one index, following WHO-5-J.

Table 1   Results of factor analysis on past parent-child relationships

Factors	Items	F1	F2	F3	h²
Distrust /rejection	My parents did not understand my real feelings.	**.82**	-.04	.01	.72
	I sometimes wanted different parents.	**.73**	.05	-.04	.50
	I sometimes felt that my parents did not like me.	**.68**	-.07	.00	.51
Relief /dependence	I told my parents about my worries and problems.	.09	**.82**	.11	.66
	I rarely consulted my parents or asked for their advice. (reversed item)	.00	**.76**	-.04	.55
	I felt ashamed of telling my problems to my parents. (reversed item)	-.21	**.46**	-.19	.33
	I often told what happened at school to my parents.	-.14	**.43**	.06	.30
Separation anxiety	I felt anxiety if my parents did not stay with me.	-.05	.12	**.79**	.72
	I was scared of my behavior alone after leaving my parents.	-.07	-.13	**.77**	.53
	If at all possible, I always wanted to be with my parents only.	.11	.02	**.60**	.37
	Initial eigenvalues	3.51	2.01	1.02	
	Sums of squared loadings after rotation	2.43	2.58	1.86	

		F1	F2	F3
	Inter-factor correlations		-.56	-.06
				.37

Table 2   Loadings of principal components in perceived social support

Item Contents	Parents	Friends
When I am depressed, parents/friends encourage me.	.76	.77
When I urgently need a large sum of money (for rent or school expenses, or accident damage, etc.), parents/friends pay for me.	.64	.59
When I am busy, parents/friends help me (housework or simple tasks).	.76	.76
When I am puzzling over problems, parents/friends distract my mind by joking or doing something together.	.74	.77
When I have problems with my study or job, parents/friends advise me.	.80	.77
When I am worried about relationships at school, workplace, community, or home, parents/friends advise me.	.81	.81
When I am shocked and upset, parents/friends comfort me.	.83	.85
When I get sick and have to stay in bed, parents/friends take care of me.	.71	.75
When I have an important event such as moving, parents/friends help me.	.74	.72
When there is a reason, parents/friends offer me a place to stay for a while.	.67	.69
When I need several thousand yen immediately because I lost my wallet or broke something and have to pay, parents/friends give me the money.	.67	.62
When I have to decide something important (e.g., the next stage of education, employment, or whether getting a long-term loan or not), parents/friends give me advice.	.79	.83
Eigenvalues	6.67	6.71
Eigenvalue contribution ratio (%)	55.61	55.94

3.2 Correlations with personal attributes

The correlations with respondents' personal attributes were examined after adding the assessment values of the items consisting of each variable. The results indicated that respondents' gender and differences in the person they regarded as "parents" were significant for certain variables including support from parents. Regarding the latter factor, an analysis was conducted for the three groups ("parents," "mother," and "others") and two groups ("parents," "others") based on the response distribution, which indicated the same results. Therefore, these factors were considered control variables in the correlation analysis.

3.3 Partial correlations

Partial correlation coefficients were calculated among the variables with gender and differences in the person that was regarded as "parents" as control variables (Table 3). The results indicated that all three factors of past parent-child relationships were significantly correlated with present social support from parents. On the other hand, support from friends was most strongly correlated with psychological well-being. Support from parents and friends was also significantly correlated.

3.4 Path analysis

Table 3   Correlations among variables (partial correlation coefficients)

Variables	Subscales		①	②	③	④	⑤
Past parent-child relationships	Distrust/rejection	①	1				
	Relief/dependence	②	-.15 *	1			
	Separation anxiety	③	-.04	.22 ***	1		
Perceived social support	Parents	④	-.49 ***	.32 ***	.32 ***	1	
	Friends	⑤	-.16 *	.18 **	.10	.47 ***	1
Psychological well-being		⑥	-.34 ***	.14 *	-.03	.37 ***	.44 ***

***p<.001, **p<.01, *p<.05

Control variables: gender of respondents, about whom they answered (parents, other than parents)

Based on the results of partial correlation analysis, path analysis was conducted by assuming the following hypothetical causal relationship; parent-child relationships in childhood affect the perceived availability of support from parents, which is the basis of perceived support from friends, which affected psychological well-being (Figure 1).

The results indicated that the three factors of past parent-child relationships were correlated with perceived support from parents. Especially, when distrust/rejection was higher, the perceived availability of support from parents was low. Moreover, parents' support was strongly correlated with friends' support, such that when perceived support from parents was high, support from friends was also high. On the other hand, parents' support functioned as a mediator of the relationship between past parent-child relationships and perceived support from friends. Furthermore, a direct path from the three factors of past parent-child relationships to support from friends was not observed. Also, psychological well-being was determined by support from friends. However, the direct path from parents' support was not significant. On the other hand, the negative direct path from distrust/rejection in the past parent-child relationship to psychological well-being was significant.

4. Discussion

Correlations between parent-child relationships in childhood and current social support were examined in late adolescent university students. The basic conceptual model of the study was that a stable relationship with parents during childhood would be correlated with high availability of social support from parents, which would form the basis of increased availability of social support from friends that leads to psychological well-being.

The results of this study supported the above model. Parent-child relationships before graduation from
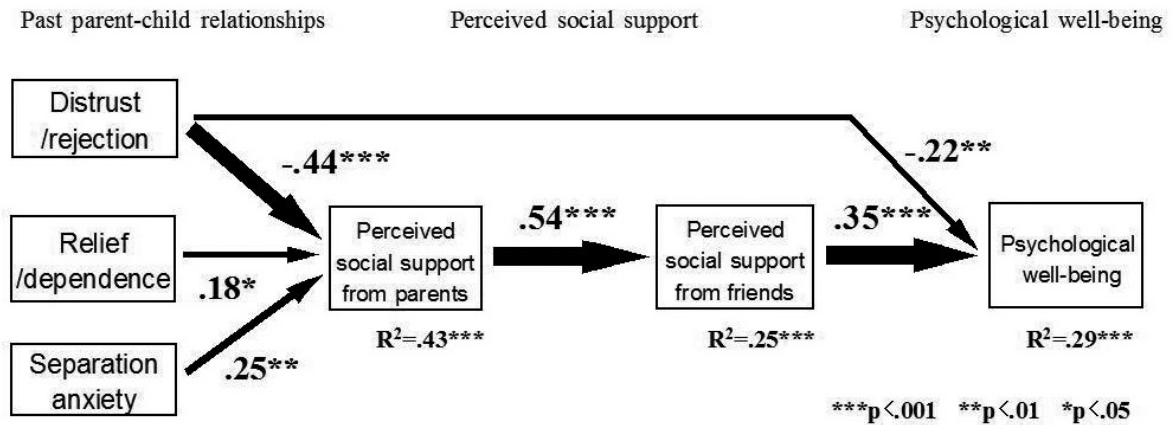
Figure 1   Hypothetical causal relationships among past parent-child relationships, the current availability of social support from parents and friends, and psychological well-being (Path diagram). "Parents" that were recalled when responding and respondents' gender are controlled.

elementary school were significantly correlated with perceived social support from parents, which was in turn, significantly correlated with perceived social support from friends, which was significantly correlated with psychological well-being. The above results correspond with attachment theory and previous discussions on the development of interpersonal relationships in adolescence[7,11]. Especially, the finding that although parents' support is the basis of friends' support, it does not directly affect present psychological well-being corroborated Santrock[11]. This result suggests that important interpersonal relationships in adolescence change from relationships with the family to those with friends and others, although emotional bonds with parents are still maintained.

On the other hand, there are certain issues that are inconsistent with the model. For example, separation anxiety also had a significant effect on perceived support from parents. People with high separation anxiety tended to highly recognize the support from parents. Separation anxiety is the anxiety about separating from parents, which reflects an unstable perception of the relationship with parents. If a person needs parents' support because of past separation anxiety, when the present parent-child relationships are good, the child would perceive that parents will provide support, even if not sufficient. The present study did not find direct support for the above contention. The degree to which the compensatory relationship, "when asked, it will be given," might develop in late adolescence should be examined in the future study.

Distrust/rejection in past parent-child relationships also had a direct effect on psychological well-being, suggesting long-term, characteristic effects of unstable parent-child relationships in childhood. It could be possible that negative recognition of parent-child relationships in childhood is generalized in interpersonal relationships with people other than parents and friends. According to the concept of the internal working model of attachment theory[16,17], the internal working model developed through stable relationships with caregivers in childhood results in more general representations in adolescence, together with other working models of different attachment relationships[18]. The present study did not assess internal working models themselves. However, it is considered rational that respondents of this study would have developed internal working models as general representations. Therefore, unstable parent-child relationships in childhood might have characteristic effects on their psychological well-being, which are different from the effects mediated by the availability of social support from parents or friends.

The results of this study supported the conceptual model developed in advance based on previous studies. However, the findings of this study are constrained by a certain limitation that includes the small-scale, cross-sectional nature of the study. Moreover, the gender ratio of the respondents was not balanced. Furthermore, information on parent-child relationships in childhood was recollected information, which might have been biased by the present situation. In the future, methods of improving adaptation despite

an adverse past parent-child relationship should be examined to maintain and improve psychological well-being.

Conflict of Interest

Acknowledgments

Note

This manuscript is based on a presentation at the 66th annual meeting of the Okayama Psychological Association.

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