Perceived social support and self-esteem as mediators of the relationship between parental attachment and life satisfaction among Chinese adolescents

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ABSTRACT

This study aimed to examine whether the relationship between adolescents' paternal and maternal attachment and life satisfaction was mediated by perceived social support and self-esteem and identify which mediator had a stronger indirect effect. The Inventory of Parent and Peer Attachment (IPPA), Multidimensional Scale of Perceived Social Support (MSPSS), Rosenberg Self-Esteem Scale (RSES), and Satisfaction with Life Scale (SWLS) were distributed to 1835 Chinese adolescents (nearly 50% male; 51% in junior-high school; aged 10–20 years, $M = 14.831$ years, $SD = 2.923$) from seven provinces. Descriptive statistics, regression, correlation, and mediation analyses were conducted to test our hypotheses. The results indicated that perceived social support and self-esteem partially mediated the relationship between paternal and maternal attachment and life satisfaction. Furthermore, the indirect effect of perceived social support was stronger than that of self-esteem. These findings perhaps provide insight into the preliminary effect of parental attachment on life satisfaction among Chinese adolescents.

1. Introduction

Under the influence of positive psychology, psychological researchers have increasingly paid attention to the importance of global life satisfaction (LS), which is a component of subjective well-being (SWB) (Diener, 1984), and one of the positive indicators of mental health (Suldo & Shaffer, 2008). This research perspective has challenged the traditional mental health criteria that emphasize the absence of psychopathological symptoms and distress. Specifically, the absence of disease appears to be a necessary, but insufficient condition of mental health (McCullough & Snyder, 2000; Seligman & Csikszentmihalyi, 2000). Besides negative psychological indicators (e.g., depression, anxiety), measuring positive indicators of mental health, such as LS, can provide a more comprehensive understanding of overall mental health (Suldo & Shaffer, 2008).

Global LS reflects a cognitive judgment of one's satisfaction with his or her life as a whole (Diener, 1994). Research with adolescents found that LS was closely related to a large body of physical, mental, academic, emotional, and social variables. LS has an important effect on the development of adolescents (Huebner, 2004; Suldo & Huebner, 2004). Therefore, it is necessary to explore the factors that influence LS.

Several variables have been identified as being associated with adolescents' LS (Huebner, 2004; Proctor, Linley, & Maltby, 2009): environmental variables (e.g., relocation, life events, school climate, culture), demographic variables (e.g., socioeconomic status, age), intrapersonal variables (e.g., personality, self-esteem), interpersonal variables (e.g., parental relationship, social support), and so on. Among these variables, in terms of predicting adolescents' global LS, demographic variables are weak predictors (Huebner & Gilman, 2004; Huebner, Suldo, Valois, Drane, & Zullig, 2004; Huebner, Valois, Paxton, & Drane, 2005), environmental variables are moderate predictors, while the other two variables are strong predictors. Among the interpersonal variables, parental attachment has been shown to have a significant impact on adolescents' LS, such that adolescents' high level of parental attachment is associated with higher LS (Jiang, Huebner, & Hills, 2013; Ma & Huebner, 2008; Pan, Zhang, Liu, Ran, & Teng, 2016). Social support also has been found to have a positive impact on adolescents' LS (Danielsen, Samdal, Hetland, & Wold, 2009; Proctor et al., 2009; Siddall, Huebner, & Jiang, 2013). Self-esteem, as an important intrapersonal variable, likewise, has an important effect on adolescents' LS (Deng, Ma, & Fang, 2016; Deng, Ma, & Wu, 2015). Although previous research has probed into the influence of parental attachment, social support, and self-esteem on LS, few researchers have simultaneously explored their possible effects on LS in

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adolescent samples. Moreover, the potential psychological mechanisms that underlie these variables have not been fully examined. Thus, this study examined the associations between parental attachment, perceived social support, self-esteem, and LS among Chinese adolescents, and further explored the potential psychological mechanisms that underlie them.

Attachment is a close relationship formed in infancy and throughout the lifespan. Attachment theory suggests that support-seeking behavior is governed by the attachment behavioral system, and the system is active across the whole life span (Bowlby, 1973). Among adults, secure attachment individuals usually have a long time of safe and comforting interactions with supportive attachment figures; they are likely to seek support when they need it and believe the support is available and satisfying. However, due to biased perceptions and expectations about social support, insecure attachment individuals report that support is less available or less satisfying (Collins & Feeney, 2000; Danielsen et al., 2009). Such research studies show that attachment quality can influence support-seeking behavior and perceived social support. The effect of adult attachment on perceived social support has been adequately studied (Collins & Feeney, 2000; Sirois, Millings, & Hirsch, 2016; Zhang, Chen, Ran, & Ma, 2016), but the effect of adolescents' attachment on perceived social support remains largely understudied. In addition, the social support process model indicates that the quality of close relationships can not only have direct effects on health and adjustment outcomes, but also have indirect effects on health and adjustment outcomes via social support (Gurung, Sarason, & Sarason, 1997); that is, social support is a mediator between close relationships quality and health and adjustment outcomes. We know that parental attachment is a type of close relationship and LS is a positive mental health indicator. Therefore, we have reason to infer that perceived social support is a mediator between adolescents' parental attachment and LS.

Attachment theory also indicates that the early experiences of interacting with caregivers (typically parents) develop the infant's mental representations of the attachment figure, the self, and the environment, which is named the "internal working model (IWM)" (Bowlby, 1973). Secure individuals have a positive IWM. Children who are securely attached to their parents are more likely to regard themselves as positive and competent compared with the insecurely attached children, and believe they are valuable and worthy of love and care (Weinfield, Sroufe, Egeland, & Carlson, 2008). When children grow into adolescents, the experiences of care and support provided by caregivers help adolescents develop adaptive cognitive, emotional, and behavioral systems (Cook, 2000). Continued and reliable parental support and care is needed to sustain positive self-esteem and self-competence in adolescence (Thompson, 2008). Recently, many empirical studies have supported this opinion. Adolescents with a higher level of parental attachment have higher self-esteem (Ju, Liu, & Fang, 2011; Pan et al., 2016; Song, Thompson, & Ferrer, 2009). Additionally, previous empirical studies have reported that self-esteem had a mediating effect on the relationships between parental attachment and LS, subjective well-being, and social adaptation (Deng et al., 2015; Deng et al., 2016; Ju et al., 2011). Therefore, the above evidence provides a concrete theoretical and empirical basis for the potential mediating effect of self-esteem in the relation between parental attachment and LS.

Based on the above literature review, the present study aimed to examine the relationships between parental attachment, perceived social support, self-esteem, and LS among Chinese adolescents. We examined paternal and maternal attachment separately. We hypothesized that paternal and maternal attachment, perceived social support, self-esteem, and LS would be significantly positively correlated with each other (H1). Moreover, we hypothesized that perceived social support would mediate the relationship between parental (paternal and maternal) attachment and LS (H2), and that self-esteem would mediate the relationship between parental attachment and LS (H3). Additionally, we hypothesized that the mediating effect of perceived social support would be significantly stronger than that of self-esteem (H4).

2. Methods

2.1. Participants and procedures

A total of 1835 adolescents (907 males, 895 females, 33 unknown) were recruited from randomly selected classes in eleven junior high and high schools in seven provinces of China: Jiangsu, Jilin, Hunan, Henan, Sichuan, Guangdong, and Tianjin; 253, 213, 322, 308, 285, 227, and 227 participants respectively. Participants' ages ranged from 10 to 20 years old ($M = 14.831$, $SD = 2.923$): 1 was 10 years old, 4 were 11 years old, 105 were 12 years old, 259 were 13 years old, 1422 were 14–20 years old, and 44 did not provide their age. They were currently in grades 7 to 12, with 935 students from junior high school and 900 students from high school.

The assessments were conducted in the respective classrooms of the participants. Before questionnaires were distributed, the teachers told them that the survey was purely for research purposes and their participation was voluntary. Verbal consent was obtained from participants. Subsequently, participants completed the self-report questionnaires anonymously and handed them over to their teachers.

2.2. Measures

2.2.1. Inventory of Parent and Peer Attachment (IPPA)

Parental attachment was measured using the parent attachment subscales of the IPPA (Armsden & Greenberg, 1987). Paternal and maternal attachment subscales were designed to assess adolescents' perceptions of the quality of attachment relationships with parents, each with 25 items. Responses to items are rated on a 5-point Likert scale (1 = almost never or never true; 5 = almost always or always true). For the paternal attachment items, participants assessed the extent of trust (e.g., "When I am angry about something, my father tries to be understanding"), communication (e.g., "My father encourages me to talk about my difficulties"), and alienation (e.g., "I get upset easily around my father"). The parallel wording of maternal items were used for assessing relationships with mothers. After reverse scoring the negatively worded items and the alienation items, the paternal and maternal attachment scores were the sum of the 25 respective items. Higher scores indicate higher quality of parental attachment. The IPPA has been shown to be a reliable and valid measure in Chinese adolescents (Song et al., 2009). Cronbach's alpha coefficients in this study were 0.905 and 0.902 for the paternal and maternal attachment subscales respectively, and 0.932 for the full parent attachment subscale.

2.2.2. Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS (Zimet, Dahlem, Zimet, & Farley, 1988) is a 12-item self-report measure of perceived social support. The measure provides a subjective assessment of social support from family, friends, and others. To make the "others" be more suitable for school students, we converted "leaders, relatives, colleagues" into "teachers, classmates, relatives". Participants were asked to report the extent to which they agree with each item (e.g., "I get the emotional help and support I need from my family") using a 7-point Likert scale (1 = very strongly disagree; 7 = very strongly agree). Subscale scores were calculated by summing related responses, with higher scores indicating a higher degree of perceived social support from that particular source. The MSPSS has showed good reliability and validity in Chinese junior high school students (Chen, 2014). Cronbach's alpha coefficients for the present sample were 0.794 for the family subscale, 0.844 for the friends subscale, 0.810 for the others subscale, and 0.903 for the full scale.

2.2.3. Rosenberg Self-Esteem Scale (RSES)

The RSES (Rosenberg, 1965) is a self-report measure of explicit self-esteem that consists of 10 items (e.g., "Overall, I am satisfied with myself."). Participants rated the items using a 4-point Likert scale (1 = strongly disagree; 4 = strongly agree). The negatively worded items