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A Relationship between Parent and Peer Attachment and Psychological Well-Being of University Students in Late Adolescence

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Abstract

The relation between parent and peer attachment and psychological well-being in late adolescence was examined using a measure of the Myanmar Inventory of Parent and Peer Attachment (MIPPA). Data were gathered from 310 (150 male and 160 female) undergraduate students at the Yadanapon University, along with Kyaukse University. A hierarchical regression model was employed to investigate the association between quality of attachment and self-esteem, life-satisfaction, and affective status. As hypothesized, perceived quality of both parent and peer attachment was significantly related to psychological well-being. Results indicated that adolescents classified as highly securely attached reported greater satisfaction with themselves, and less symptomatic response to stressful life events. While negative life change was independently related to well-being, the results indicate considerable discrepancy between those adolescents securely attached to parents and those with low security in the strength of association between negative life change and symptomatology. This pattern was not evident for the two categories of peer attachment. Such data suggest that those adolescents characterized by low security to parents may be more vulnerable to the deleterious effects of such damage on well-being.

Key-words: parent/peer attachment, psychological well-being, late adolescence

Introduction

The relationship between ties to one's family and one's personality and well-being has long been a question of interest in developmental psychology. Recently, there has also been a growing recognition of the increasing importance of extrafamilial relationships through childhood and adolescence. In the present study, we examine the attachment relationships of late adolescents to their parents and peers, and explore their differential association to well-being.

Attachment is generally defined as an enduring affectional bond of substantial intensity. The central concern of attachment theory is the implication of optimal and nonoptimal social attachments for psychological fitness (Ainsworth, Blehar, Waters, and Wall, 1978; Bowlby, 1973a, 1977; Bretherton, 1985). Bowlby's theoretical work (1973b, 1980, 1982) conceptualizes the formation of attachments in infancy, and explains the emotional and psychological disturbances that may result at any age from their actual or threatened disruption. Organized patterns of behavior that develop and maintain affectional bonds are seen to persist throughout life, and to be activated in order to maintain or regulate some degree of proximity to highly discriminated persons. A sense of security is derived from the maintenance of a bond in which confidence in the availability (accessibility and responsiveness) of the attachment figure(s) predominates over fears concerning unavailability of this figure(s) in times of need. By contrast, anxiety, sadness, depression, and anger may be produced by the threatened or actual loss of attachment relationships, or by unresponsive and unpredictable attachment relationships. According to Bowlby's model (1973b), the child with secure attachment to principal care-givers carries an unconscious assurance that she/he has access to trustworthy, helpful others, and views him/herself as worthy of love and caring. Such

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a child is more likely to develop a balance of self-reliance and appropriate help-seeking capacities as she/he matures.

Bowlby (1982) has concluded that human beings at any age are most well-adjusted when they have confidence in the accessibility and responsiveness of a trusted other. In his view, attachment across the life span may be inferred from a behavioral disposition to seek proximity to and/or contact with particular others, under conditions of vulnerability (fear, illness, etc.). With increasing age, behaviors promoting proximity to attachment figures become somewhat less intense and frequent, and symbolic communications (e.g. phone calls, letters) become increasingly effective in providing comfort. Despite such age-related changes in attachment behavior, expectations of attachment figures based on earlier experience are believed to persist and to influence the individual's mode of relating to others. Examples of aspects of "interactional styles" (Bretherton, 1985) that may develop from insecure attachment (s) are anxious "clinging" and resentful detachment. The type of attachment an individual develops with their primary attachment figure, and therefore the information stored within the internal working model, differ across individuals depending on early childhood experience and attachment quality.

During adolescence, attachment behavior is often directed toward nonparental (noncaretaking) figures (Weiss, 1982). While peers may not necessarily be considered stronger or wiser (as per Bowlby's definition of childhood attachment), they may be considered such on a situational or temporary basis, as in adult peer relationships. Thus, certain peer relationships, especially beginning in adolescence, can be considered as a type of attachment relationship. In Weiss's view, a particularly important aspect of adolescent peer attachment is the peer's ability to support and encourage the adolescent's assumption of growth-promoting challenges.

Following Bowlby's attachment theory, Greenberg and his colleagues (1984) developed a self-report measure of the behavioral and affective/cognitive dimensions of adolescents' attachment to their parents and peers. Their findings that 12-to 19-year-old adolescents' attachments to both parents and peers were related to self-esteem and life satisfaction (correlation coefficients were between .30 and .40) suggest the role of attachments in psychological well-being, as postulated by attachment theorists. While Greenberg's measure provided greater operational clarity as to the nature of attachment in adolescence, the scale reliabilities were only moderate. Furthermore, because the affective dimension was unifactorial, exploration of individual differences in the nature of attachment was limited. By examining qualitative dimensions of attachment, their roles in the development of individual differences may be studied.

Armsden and Greenberg (1987) examined the general affective/cognitive dimensions of attachment to parental and peer figures in their report. They hypothesized that the "internal working model" of attachment figures may be tapped by assessing (1) the positive affective/cognitive experience of trust in the accessibility and responsiveness of attachment figures, and (2) the negative affective/cognitive experiences of anger and/or hopelessness resulting from unresponsive or inconsistently responsive attachment figures. To test their hypotheses they developed a more comprehensive and reliable measure of attachment that assess adolescents' perceptions of the affective/cognitive dimension of attachment to parent and peer.

As might be expected from the preceding theory, there is evidence of a strong link between the adolescent's intimate relationships and such outcomes as self-concept, psychological adjustment, and physical health (Bachman, Kahn, Mednick, Davidson, and Johnston, 1967; Coopersmith, 1967; Gallagher, 1976; Offer and Offer, 1975; Greenberg *et al.*, 1984). In their study of 13-to 20-year-olds, Burke and Weir (1978) found that those

adolescents expressing greater satisfaction with help received from peers, and particularly from parents, experienced greater psychological well-being. Rosenberg (1965) reported a stable relationship throughout adolescence between self-esteem and perception of warm relationships with parents. In college students, warm and autonomous relations with parents has been found to be associated with higher stages of ego-identity (Marcia, 1980), greater self-disclosure tendencies (Snoek and Rothblum, 1979), and in freshman males, better predicted well-being in the senior year than did academic status and involvement in activities (Mortimer and Lorence, 1980).

Both parent and peer attachment qualities have been shown to be associated with psychological health and adjustment in adolescence (Armsden & Greenberg, 1987). Adolescents are more likely to have high self-esteem when parents are supportive and interested in their activities and low self-esteem when parents are perceived as rejecting (Collins & Read, 1990). Studies tend to indicate that insecure attachment is associated with vulnerability for depression symptoms and low levels of self-esteem (Engles et al., 2001; Heaven & Goldstein, 2001; Muris, Messters, Melick, & Zwambag, 2001). Adolescents have been found to be more susceptible to symptoms of depression when they perceive low levels of trust and communication in their attachment to their parents, and high levels of alienation (Milne & Lancaster, 2001; Muris et al., 2001).

If an individual's working model of attachment is low in quality, he or she is more likely to view himself or herself as unlovable and to view the social environment as untrustworthy, unpredictable or even hostile. Conversely, individuals who show high quality of attachment are likely to see themselves as worthy of love and have their behaviors well-adjusted (Buist et al. 2004). An encouraging and cooperative parent is a source of support and can help foster the development of a secure parent-child attachment bond. This attachment bond, in turn, can provide the child with a secure base from which to explore the environment and develop personal and interpersonal competencies (Bretherton, 1992).

Attachment theorists have postulated that the origin of negative cognitive biases and expectation in relationships is found in a child's early relationship with his/her caregivers (Bowlby, 1969a). Insecure attachment relationships are believed to form in dyads in which the mothering response to the infant is inadequate to his or her needs (Ainsworth, Blehar, Waters, & Wall, 1978). The child internalizes beliefs about relationships and self-worth from the response of the mother to his/her signals (Bowlby, 1969a). Thus, negative experiences in early relationships can lead to internalized views of the self as bad or unworthy (Bowlby, 1969b).

The relationship between attachment style and pathology has also been reported in non-clinical populations such that insecure and preoccupied attachment strategies were associated with higher levels of depression (Allen, Moore, Kuperminc, & Bell, 1998; Kobak, Sudler, & Gamble, 1991). In other words, the security of the attachment relationship provides the basis for the child's development of independence in conflicts (Allen & Hauser, 1996). If the child has a secure relationship with the caregiver, then he or she would tend to feel more comfortable asserting individual opinions and creating disagreement because he/she can be confident of the caregiver's continued support. Overall, insecure attachments to both parents and peers have been associated with higher levels of depressed mood in early adolescence (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990).

As we understand so little about adolescents' attachment in Myanmar, the present study should explore the nature of attachment in adolescent and drawing upon theoretical models as well as previous research, to identify variables that are likely to be consequences of attachment style. This study thus included: (i) dependent variables (self-esteem, life-satisfaction, anxiety and depression); and (ii) independent variables (gender, parent attachment and peer attachment

of adolescents). In addition, the influence of attachment measure on the relationship between negative life change events and psychological symptomatology was explored. Based on previous literature, the following hypotheses were formulated:

- Hypothesis 1:* Quality of attachment to parents and peers would be related to measure of well-being (self-esteem and life satisfaction).
- Hypothesis 2:* Adolescents with qualitatively different attachments to parents and peers would differ in well-being.
- Hypothesis 3:* The associations between negative life-change and psychological symptomatology would be weaker for the group of adolescents who are more securely attached.

Method

Participants

Participants of the study were 310 undergraduate students from 5 departments of two Universities (Yadanapon University and Kyaukse University) located in Mandalay Division. Participants ranged in age from 16 to 20 years.

Procedure

Permission for research with the participants was first obtained from the Rectors and Professors. Then, survey questionnaires were distributed to the 335 student participants. Before the participants filled in the questionnaire, the researchers gave a short announcement to the participants, stating that all data would be kept confidential and informed the participants should feel free to answer the questionnaire. Out of the 335 subjects, the respondents who scored 0 and 9 on the Lie Scale were excluded. The final usable sample for the present study was 310 students.

Measures

Parent and Peer Attachment. Parent and peer attachment were measured using the Myanmar Inventory of Parent and Peer Attachment (MIPPA). The original IPPA was developed by Armsden and Greenberg (1987) to assess adolescents' perceptions of the positive and negative affective/ cognitive dimension of relationships with their parents and close friends, in particular how well these figures serve as sources of psychological security. Three broad dimensions are assessed: degree of mutual trust; quality of communication; and alienation. Participants are asked to rate each of the item on a five-point Likert-scale ranged from 1 (never true) to 5 (always true). The MIPPA scale used in this study was again conducted item analysis and tested for internal reliability using the Cronbach's alpha. High reliabilities of .79 and .89 were obtained from the 24-item parent attachment scale (total) and the 24-item peer attachment scale (total), respectively. The values of alpha for the subscales were found to be .65 for parent Trust, .81 for parent Communication, .67 for parent Alienation, .87 for peer Trust, .86 for peer Communication, and .62 for peer Alienation.

Life Satisfaction. Life satisfaction was measured with the Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin, 1985). The participants were asked to respond to five general statements about their life. The alpha of this scale was found to be .67.

Self-Esteem. Self-esteem was measured using Rosenberg's (1965) Self-Esteem Scale. This scale consists of ten items. Responses were made on a 4-point scale ranged from 0 (strongly disagree) to 3 (strongly agree). The alpha was found to be .73.

Anxiety. Adolescents' anxiety was measured by using the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985). The RCMAS is a 37-item scale design to assess anxiety-related symptoms with a Yes/No response format. A total anxiety score for each student was calculated by adding the numeric responses to the 28 questions on the scale, i.e., 37 total items minus 9 questions on the Lie Scale. The alpha of this scale was found to be .81.

Depression. Depression was measured with the Beck Depression Inventory developed by Beck (1996). The BDI consists of 21 groups of statements. The indicator has been used extensively to measure a mild degree of symptomatology. The participants were asked to pick out the one statement in each group that best describes the way they have been feeling. The alpha of this scale was found to be .83.

Stressful Life Events. Stress was measured using the Adolescent Life Change Event Scale (ALCES; Yeaworth et al., 1980). Respondents were asked to indicate which of 31 listed events occurred in the past year. Life change scores were calculated by summing impact rating separately for positive or negative events.

Results

Table 1 presents the Pearson correlations between the six parent and peer scales. Parent scales were more significantly related to each other than they were to the peer scales. Trust and Communication scores were highly correlated with both parent ($r = .68$) and peer ($r = .72$) measures. Corresponding parent and peer scales were not as strongly related; the coefficient obtained for the Trust scales was .31, for the Communication scales, .32, and for the Alienation scales, .49.

In order to test the relationship of quality of attachments to measures of psychological status, hierarchical multiple regression analyses were performed. The criterion variables examined were two well-being measures (Self-Esteem and Life-Satisfaction) and two indices of affective status (Depression and Anxiety). Sex was entered in the first step, followed by simultaneous entry of positive and negative life-change. Inclusion of the attachment variables followed. The intercorrelations of predictor variables, excluding sex, are presented in Table 2. In consideration of the predictors' multicollinearity, Parent Attachment was entered after Peer Attachment, thus biasing against its presumed greater explanatory power.

Table 3 presents the results of multiple regression analyses for the well-being measures. The variables accounted for 16% of the total variance in Self-Esteem scores and 15% of the variance in Life-Satisfaction scores. Peer and Parent Attachment significantly predicted both Self-Esteem and Life-Satisfaction. Positive Life Change was not significantly predicted to both well-being measures. However, Negative Life Change was significantly correlated with Self-Esteem, but not with Life-Satisfaction. Life-Change scores accounted for 2% of the variance in Self-Esteem scores and 3% of the variance in Life-Satisfaction scores. Parent Attachment appeared more highly related to Self-Esteem than to Life-Satisfaction, accounting for 8% and 6% of the variance, respectively, in these measures. Peer Attachment was not highly but significantly related to both well-being measures. Six and 6% of the variances in Life-Satisfaction and Self-Esteem, respectively, were accounted for by Peer Attachment scores. The contribution of sex was nonsignificant for both well-being criterion measures.

The results of the multiple regression analyses for the affective-status measures (Anxiety and Depression) are presented in Table 4. Together, the life-change variables accounted for between 5% and 11% of the variance in affective status scores. Similar to the results for the well-being criterion measures, the predictor accounted for 18% and 26% of the total variances in Anxiety and Depression, respectively. Negative Life Change, Peer and Parent

Attachment all significantly predicted scores on these two affective status measures. But the contribution of Positive Life Change was not significant for both affective status measures. On the average, Peer Attachment accounted for about 4.5% of the total variance in scores on affective-status measures. Parent Attachment accounted for an additional 8% of the variance in Anxiety and 7% in Depression scores. Moreover, two indices of affective status were significantly predicted by sex.

Summarizing the multiple regression analyses, when entered last into the regression equation (following Sex and Negative Life Change), Parent and Peer Attachment together accounted for 14% of the variance in Self-Esteem and 12% of the variance in Life-Satisfaction scores. Parent and Peer Attachment together also accounted for 12% of the variance in Anxiety and 12% of the variance in Depression. In order to begin examination of individual differences in attachment across types of relationships, an exploratory categorization of subjects was made. Parent attachment and peer attachment were considered separately. The score distribution of each MIPPA subscale (Trust, Communication, and Alienation) was divided into lowest, middle and highest third. The separate distributions of the Parent and Peer subscale scores for male and female subjects were divided as just described. Each subject was then given a rating of “low”, “medium” or “high” for each of the three subscales according to where her/ his score fell. A set of logical rules defined attachment group assignment:

1. Individuals were assigned to the *High Security* (HS) group if their Alienation scores were not high, and if their Trust or Communication scores were at least medium level. Because of the theoretical importance given by Bowlby to the element of trust in the attachment relationship, in cases where Trust scores were only medium level but Alienation scores were also medium level, HS group assignment was not made.

2. Individuals were assigned to the Low Security (LS) group if their Trust and Communication scores were both low, and if their Alienation scores were medium or high level. In cases where the Trust or Communication score was medium level but the other was low, LS group placement was made if the Alienation score was high.

Using this scheme, 61% of the sample was assignable to a parent attachment group and 55% fell into one of the peer attachment comparison groups. While the individuals scoring in the midrange were excluded from this analysis, it was our intention to define, on theoretical grounds, two attachment comparison groups that would be maximally distinct. The compositions by sex of the Parent and Peer Attachment groups are shown in Table 5. Overall chi-square analyses were not significant.

In order to explore the validity of assigning adolescents to differentially defined attachment groups, the parent and peer attachment groups were separately compared on variables theoretically expected to distinguish them. Separate set of *t* tests for parent and peer comparison groups were conducted to test the hypotheses that the HS group was higher than the LS group in self-esteem and life-satisfaction, while lower than the LS group in anxiety and depression.

As Table 6 shows, the HS parent-attachment group was significantly different from the LS group on all measures. The mean self-esteem score for the HS group was 18.00 and the mean self-esteem score for the LS group was 15.60. Among the peer attachment classification groups, the HS group was significantly higher in self-esteem and life-satisfaction and lower on the two affective status measures than the LS group. The mean self-esteem scores of HS and LS Peer groups were 17.83 and 15.61, respectively.

The third major hypothesis of this study concerned a greater association between negative life change and psychological symptomatology for the LS attachment groups than

Table 1 Intercorrelation of Parent and Peer Attachment Scales

	Parent		Peer		
	Communication	Alienation	Trust	Communication	Alienation
Parent					
Trust	.68***	-.39***	.31***	.26***	.01
Communication	-	-.40***	.26***	.32***	-.06
Alienation		-	-.15**	-.00	.49***
Peer					
Trust			-	.72***	-.12*
Communication				-	.03

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

Table 2 Intercorrelations of Predictor Variables

	Negative life change	Parent Attachment	Peer Attachment
Positive life change	.23***	.18***	.19***
Negative life change	-	-.19***	.00
Parent Attachment		-	.34***

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

Table 3 Regression Statistics for Predicting Well-Being from Peer and Parent Attachment Scores

Criterion	Predictor	R ^{2a}	F ^b	r
Self-esteem	Sex	.00	0.19	.05
	Positive life change	.00	0.44	-.03
	Negative life change	.02	5.92*	-.06
	Peer attachment	.08	17.63***	.14
	Parent attachment	.16	29.02***	.32
Life satisfaction	Sex	.01	2.15	.11
	Positive life change	.02	3.08	.02
	Negative life change	.03	2.51	-.02
	Peer attachment	.09	22.56***	.18
	Parent attachment	.15	21.39***	.27

^aReflects cumulative R², ^bF- to - enter value, *P < .05, **P < .01, ***P < .001

for the HS groups. Correlations were obtained between degree of negative life change and measures of affective status for the HS the LS attachment groups. Because Parent and Peer Attachment scores were known to be moderately related to the variables examined in this analysis, the common variance was removed.

As shown in Table 7, a pattern of moderate partial correlation coefficients emerged for the LS parent group, in contrast with generally low coefficients for the HS parent group.

Table 4 Regression Statistics for Equations Predicting Affective Status from Peer and Parent Attachment Scores

Criterion	Predictor	R ^{2a}	F ^b	r
Anxiety	Sex	.01	3.86*	-.15
	Positive life change	.01	0.11	.02
	Negative life change	.06	16.44***	.16
	Peer attachment	.10	13.32***	-.11
	Parent attachment	.18	28.03***	-.31
Depression	Sex	.02	6.71*	-.21
	Positive life change	.03	0.90	-.04
	Negative life change	.14	40.88***	.28
	Peer attachment	.19	19.03***	-.14
	Parent attachment	.26	28.65***	-.30

^aReflects cumulative R², ^bF- to - enter value, *P < .05, **P < .01, ***P < .001

Table 5 Frequencies and Proportions of Males and Females in Attachment Groups^a

	High security	Low security	Not categorized
Parent ^b			
M	.35(53)	.26(39)	.39(58)
F	.33(53)	.29(46)	.38(61)
Total	.34(106)	.27(85)	.38(119)
Peer ^c			
M	.34(51)	.25(38)	.41(61)
F	.33(53)	.18(29)	.49(78)
Total	.33(104)	.22(67)	.45(139)

^aFrequencies are in parentheses, ^b $\chi^2(2) = 0.32$, ns, ^c $\chi^2(2) = 3.01$, ns.

Table 6 Summary of Tests of Differences between Parent and Peer Attachment Groups (*t* Values)

	Parent			Peer		
	High security	Low security	<i>t</i> value	High security	Low security	<i>t</i> value
Self-esteem	18.00(3.71)	15.60(3.14)	4.75***	17.83(3.69)	15.61(3.16)	4.05***
Life satisfaction	17.25(3.56)	15.07(3.55)	4.20***	17.41(3.61)	15.15(3.76)	3.94***
Anxiety	9.58(4.81)	14.28(4.54)	-6.88***	9.88(5.02)	13.81(4.61)	-5.16***
Depression	8.50(6.99)	14.71(8.20)	-5.66***	8.45(6.93)	13.69(8.05)	-4.52***

*P < .05, **P < .01, ***P < .001

Table 7 Correlation Coefficients for Negative Life-Change and Psychological Symptomatology (Controlling for Parent and Peer Attachment Scores)

	High security group		Low security group	
	Parent(n= 104)	Peer(n= 103)	Parent(n= 82)	Peer(n= 66)
Anxiety	.05	.13	.18*	.12
Depression	.12	.16	.25*	.19

* $P < .05$, ** $P < .01$, *** $P < .001$.

The analysis of the two peer attachment groupings suggested no difference between the HS and LS groups in the relationship between negative life change and symptomatology. The possibility was investigated that the HS and LS groups differed in the degree of negative life change experienced. The LS parent attachment group reported significantly more negative life change than the HS group ($t = -3.77$, $df = 184$, $p < .001$, two-tailed), but no difference was found for the two peer groups.

Discussion

As hypothesized, quality of parent and peer attachments in late adolescence was highly related to well-being, particularly to self-esteem and life satisfaction. This finding is congruent with the results of a number of studies linking psychological adjustment to the quality of intimate relationships with parents and peers. Importantly, quality of attachment not only was strongly related to well-being, but also meaningfully contributed to predicting the adolescents' anxiety and depression. These findings are congruent with Bowlby's hypothesis (1973b) regarding the relationships between attachment, and anxiety and depression. According to a hierarchical regression model, quality of attachment to parents was significantly related to the criterion measures after quality of peer attachment and negative life change had been controlled.

Thus, it appears, even in a college-aged population, the present perception of family relationships continues to be linked with well-being. This finding is congruent with that of Mortimer and Lorence (1980), who reported significant influences of family relationships on self-esteem in a college population. While the IPPA taps aspects of current relationships with parents studies have indicated that parent-child relationships are quite stable through childhood and adolescence (Crandall, 1972; Hunt and Eichorn, 1972), and that there is continuity in child-rearing orientations of both parents (Roberts, Block, and Block, 1984). Such data are congruent with Bowlby's (1982) thesis that, barring major discontinuities in experience, quality of attachment is enduring.

In this study, a partial classification scheme was devised in order to compare late adolescents according to the differential nature of their attachments. Adolescents with attachments marked by high security to their parents appear very well adjusted. They possess higher than average self-esteem. About half of these subjects also reported a high quality to their relationships with peers. In contrast, subjects comprising the LS parent attachment group described feelings of anxiety and depression. They possess lower than average self-esteem.

While negative life change was independently related to well-being in this study, the results indicate considerable discrepancy between those adolescents securely attached to parents and those with low security in the strength of association between negative life change and symptomatology. This pattern was not evident for the two categories of peer attachment. Such data suggest that those adolescents characterized by low security to parents may be more

vulnerable to the deleterious effects of such damage on well-being. These findings are consonant with Greenberg et al.'s (1984) data suggesting a moderating effect of positively perceived attachment to parents but not to peers, for their sample of 12-to-19-year-olds. Together, these results, contrary to Gad and Johnson's negative findings (1980), contribute toward substantiation of a buffering role of parental relationships in adolescence. Such a role is predicted by Bowlby's theoretical formulations (1982), providing evidence for one mechanism by which attachment may maintain its hypothesized enduring relationship to quality of adaptation. However, as Thoits (1982) cautions, only longitudinal data can address the causal question implicit in the buffering hypothesis.

The method of comparison of individual differences in adolescent attachment should be considered exploratory. First, the dimensionality of adolescent attachment remains open to question. Possibly, more heterogeneous item content would result in better confirmation of our hypothesis of affective/cognitive and behavioral dimensions. The superiority of this categorization method over the use of linear scale scores on a single dimension of security remains to be proven. The attachment groups formed in this study were based on relative criteria, determined by the characteristics of one sample late adolescents (college students). The variability of self-esteem scores and the ranges of the MIPPA scores do suggest that differentiation of subjects was adequate for limited generalizability of findings within late adolescence. With our conceptual analysis, however, 38% of the sample for parent attachment and 45% for peer attachment were not categorized. While we have characterized a somewhat extreme subsample as LS, more than one pattern of insecure attachment may be discriminable. Furthermore, these categories are only comparative in nature, denoting more secure vs. more insecure.

The MIPPA has shown substantial reliability as a measure of perceived quality of close relationships in late adolescence. Further development with younger adolescents is planned. Construct validity remains to be demonstrated through the clinical assessment of adolescents' psychological functioning (rather than self-report methods). One question that might be raised regards the validity of findings resulting solely from self-report measures. While multimethod investigations will provide necessary corroboration of these findings, the pattern of results provides evidence to support their validity. First, there is a relatively low correlation between self-reported quality of relationships to parents and that to peers. Thus, there does not seem to be a plaintive set with individuals reporting homogeneously across two different types of attachment figures. Second, as hypothesized in this study, differential associations were found between outcome measures and security of attachment to peers vs. parents. Behavioral observation of adolescents' interactions with their parents and peers are also needed to further validate the MIPPA.

Limitations

Several limitations of this study need to be addressed. First, this study is limited by the inclusion of only adolescents. Parent and peer report measures were not available to the researcher. Especially, when examining the role of parental and peer attachment relationships on psychological well-being, parent and peer perspective would have provided much additional rich data. Second, the generalizability of the findings to the late adolescence population is also limited. This study was limited to university students. Generalization to adolescents from different groups may be impacted by the homogeneous nature of the current sample. Additional research is needed to assess the external validity of the findings across levels of education. Third; this study did not examine potential interactions between sex and quality of attachment relationships. Various theoretical positions (Bowlby, 1969/1977; Meeus, et al., 2002) suggest possible interactions between gender of child and gender of parent in terms of

attachment and psychological well-being outcomes and these should be explored in future research.

Finally, this study used a self-report paper-pencil assessment to collect data. Self-report assessments are widely used in collecting data on close relationships. There are, however, common problems with the use of such measures including reporter bias and the problem of dishonest responses by the respondent (Gay, 1996).

Future Research

The comparisons of attachment groupings based on patterns of subscale scores represents an advance toward fuller understanding of individual differences, beyond that provided by linear scale scores. Following the development of an improved method of classification, several avenues of investigation seem particularly warranted. First, in light of Main and Weston's (1981) and Lamb's (1977) infant studies providing evidence for differential qualities of attachment to mothers and fathers, we were currently expanding the MIPPA to separately assess mother and father attachment in adolescence. By doing so, questions may be examined regarding the effects of discordant attachments to these figures on well-being and the disposition to form secure or insecure peer relationships, as well as their differential relationship to the working model of the self (Bowlby, 1980). Further exploration in this area may help explain the present findings that adolescent subjects with LS parent attachment showed more confusion and contradiction in their "self-system" (Epstein, 1980).

Second, the importance of parent vs. peer attachment throughout adolescence needs continued investigation. In contrast to Greenberg et al's (1984) findings of little association between parent and peer affectional attachment, the present results indicate substantial correspondence. There were some individuals, however, who were classified as insecurely attached to parents but securely attached to peers, or vice versa. These groups were too small for meaningful analysis, but deserve future attention-particularly the group comprised of individuals who may be able to "compensate" for poor parental relationships by turning to their peers.

Third, possible sex differences in peer attachment should be explored. Females scored significantly higher on the peer Communication subscale (Armsden and Greenberg, 1987). Hunter and Youniss (1982) report a similar sex difference in adolescent communication. In addition, Bowlby (1973b) has noted a greater occurrence of anxious, clinging attachment in girls while among boys, detachment is more common. Thus, while sex differences in a conceptualization of attachment common to both males and females is an important question (raising the issue of culturally normative socialization mediating attachment formation), separate norms may prove to have great predictive power.

The last suggested avenue for future research is methodological in nature. In order to lend support to Bowlby's reasonable theoretical notion that security of attachment is causally related to well-being longitudinal data are called for. Such data would also help answer the troublesome question of whether the relationship between attachment and well-being may be explained by the fact that individuals with poorer adjustment perceive their relationships as less satisfactory. Precedential longitudinal research on attachment in early life and on the family-related antecedents of self-esteem in childhood (Coopersmith, 1967; Rosenberg, 1965), however, suggests the appropriateness of a developmental hypothesis of a causal association between parental influence and well-being in adolescence.

Implications

According to attachment theory, attachment style is relatively stable throughout the life span. Early parent-child attachment experiences are key influences on relationships with others

and also play an important role in shaping views about romantic relationship. Family life educators should develop programs for adolescents that focus on developing and maintaining positive relationships with parents in order for these adolescents to develop healthy and positive peer relationships, and psychological well-being. Programs should involve not only adolescents but also their parents. Parents need to learn to listen to their child's problems and troubles and to ask their child if something is bothering them. Helping adolescents deal with the emotions they are experiencing in a positive way also should be addressed.

Second, teachers and educators should promote positive peer relationships among adolescents. Results of the present study suggest that adolescents who have more securely attached to their peers are more likely to experience positive psychological well-being. Professionals should recognize the importance of peers during adolescence. As adolescents get older, their interaction with their peers increases. Adolescents who have problems with their peers are more vulnerable to other problems, including behavior problems in school, drug use, and unprotected sex. Educating adolescents on how to positively communicate and socialize with their peers is critical for optimum adolescent development.

Finally, family life educators and other professionals need to pay special attention to adolescents. The result of the present study provides overall support for the role of parental attachment as a contributor to the internal working model of self among emerging adult. Our results suggest, furthermore, that the internal working model of self/self-worth contributes directly to depressive symptoms, mediating the relationship between parental attachment and depressive symptoms. For the emerging adult who may experience insecure parental attachments, for example, the enhancement of self-worth could be important as a source of protection from depressive symptoms. Preventive and counseling interventions that focus on developing self-worth may be more feasible and salient for emerging adults than seeking to modify current parental relationships.

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