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Adolescent Attachment and Ego Identity: A Structural Equations Approach to the Continuity of Adaptation

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Abstract

The purpose of this study was to examine the concurrent relation between adolescent attachment to parents and the achievement of ego identity in late adolescence within a lifespan continuity of adaptation framework. Also examined were the contribution of parental control to the formation of attachment and the acquisition of ego identity. One-hundred one college freshmen responded to at least two measures (each) of parental attachment, ego identity, and maternal and paternal control. Model testing in a structural equations analysis showed that (a) there was no relation between adolescent attachment and ego identity; (b) adolescents who perceived that their parents were controlling reported weak attachment; and (c) adolescent identity achievement was inhibited by perceptions of high parental control. The first finding was discussed in terms of its implications for a lifespan theory of adolescent attachment and the continuity of adaptation framework. The latter two findings were discussed in terms of the growing literature on family dynamics and identity development. Implications for future research are drawn.

The study of human attachment relations has traditionally focused on the mother-infant dyad. John Bowlby's (1958, 1982; Bretherton, 1985) ethological perspective has long been a preferred explanation of the significance of this primary bond. According to Bowlby (1958) attachment behaviors promote the survival of the vulnerable infant by insuring the close proximity of adult caretakers (typically mother). In more recent theoretical formulations the concept of attachment has

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been considerably broadened (e.g., Sroufe & Waters, 1977). In addition to its protective function attachment relations are also seen to support the infant's mastery of the inanimate and social world (Sroufe & Waters, 1977). Secure mother-infant attachment provides a context for the development of adaptive social and intellectual competencies (Waters & Sroufe, 1983). Hence, "an adaptive attachment relationship can be reflected in a changing, though predictable organization of behavior" (Sroufe & Waters, 1983, p. 1188; see Lamb, Thompson, Gardner, Charnov, & Estes, 1984, for a critique). According to the "organizational perspective" individual differences in the quality of attachment should be related to different patterns of behavioral organization. The quality of attachment should not only mediate the mastery of concurrent developmental tasks, but it should also be related to successful adaptation in later developmental periods. Hence, the organizational perspective describes a continuity of adaptation between the organization of behavior called "secure attachment," and other patterns of concurrent and prospective adaptive behavioral organizations. Recent research seems to support these expectations. For example, individual differences in the quality of adaptation at 18-months has been found to predict individual differences in problem-solving style at 24-months (Matas, Arend, & Sroufe, 1978). The continuity of adaptation has also been shown between secure attachment and both later social competence in the peer group (Waters, Wippman, & Sroufe, 1979; LaFreniere & Sroufe, 1985), and ego resilience and curiosity (Arend, Gove, & Srouge, 1979). Easterbrooks and Lamb (1979) report that individual differences in secure attachment is related to successful adaptation in an initial encounter with peers. It should be noted that, although the continuity of adaptation framework describes the pattern of relations between attachment and both concurrent and prospective adaptations, much of the research in the infancy literature is concerned with prospective adaptations, which requires longitudinal data.

While the organizational perspective broadens our theoretical understanding of attachment, there is growing consensus that the study of attachment should be extended in other ways as well, extended beyond the mother-infant dyad and extended beyond early childhood (Lamb, 1975; Lerner & Ryff, 1978). The nature of attachment relations in adolescence has been receiving particular attention in recent years. Much of this research has been generated by the construction of a parent and peer attachment inventory by Greenberg and his colleagues (Greenberg, Siegel, & Leitch, 1983; Armsden & Greenberg, 1985). The initial version of the inventory operationalized felt security (perceived quality of affect towards parents and peers) and proximity-seeking (degree to which adolescents utilize or seek out parents and peers under varying conditions of stress), two dimensions of attachment relationships that derive from the ethological-organizational perspective (Bowlby, 1958; Sroufe & Waters, 1977). Using this scale Greenberg et al. (1983) found that adolescent felt security to both parents and peers, but particularly to parents, was related to the adolescents' perceived self-esteem and life satisfaction. While peer utilization (i.e., proximity-seeking) was modestly related to adolescent well-being, parental utilization was not. As the authors pointed out, however, this was probably due to

the fact that the extent of parental utilization was unusually high across the range from early to middle adolescence, thereby reducing variability and hence the sensitivity of the measure of this dimension. It is worth noting that adolescents appeared to seek out parents even when they perceived that their relationship with their parents was unsatisfying, a finding that parallels known attachment patterns in infancy (Greenberg et al., 1983).

In a second investigation Armsden & Greenberg (1985) found that adolescents' attachment to parents showed strong positive correlations with several indices of healthy family climate (cohesion, expressiveness, organization) and negative correlations with family conflict and control. Parental attachment was also correlated with adolescent proximity-seeking (parental utilization) in times of need. The attachment measures accounted for relatively large percentages of variation in self-esteem, life satisfaction, and affective status measures. Some success was also reported in classifying adolescents into secure and avoidant attachment groups. Securely-attached adolescents appeared to present a better adjustment profile than insecurely-attached adolescents. The latter group described their relationships with their parents in terms of resentment, alienation, and emotional detachment (Armsden & Greenberg, 1985).

Taken together these and other studies (e.g., Armsden, 1986) provide preliminary evidence for the continuity of adaptation between adolescent attachment and both family climate variables and also various adolescent adjustment indices. The purpose of the present study is to further explore the functional importance of adolescent attachment to parents within the continuity of adaptation framework through the use of structural equations modeling. The extant research on adolescent attachment has traditionally relied on simple multiple regression and product-moment correlations as the principal data analytic strategy. However, the relation among attachment, parental variables, and measures of social and personological adjustment may reflect rather complex patterns of causality. Second-generation multivariate statistics (e.g., structural equations) are now available that permit the assessment of these more complex models of causality (Joreskog, 1974). Structural equations permits one to test models that separate direct from indirect effects, causal from spurious relationships, and unidirectional from multidirectional relationships. Moreover, this technique allows one to segregate the effects of measurement error through the use of parallel operationalization of latent, unobserved theoretical constructs and performs confirmatory factor analysis on the measurement indices. These procedures convey obvious statistical advantages when the theory under test involves complex relations to other variables and when constructs are measured with error.

We are interested in determining the concurrent relationship between parental attachment and ego identity in late adolescence, and the role that perceived parental control might play in the establishment of attachment relations and in the achievement of ego identity. Hence, we are positing three latent constructs (parental attachment, ego identity, and perceived paternal and maternal control) and seven indicators (at least two measures for each construct). Ego identity development is a

particularly important variable to study within the context of the continuity of adaptation framework. The achievement of ego identity is generally recognized as the fundamental developmental task of adolescence (Erikson, 1968; Marcia, 1980; Bourne, 1978a, b). Adolescent identity exploration has been shown to be sensitive to parenting styles (Enright, Lapsley, Drivas, & Fehr, 1979; Adams & Jones, 1983) and to styles of family functioning (Grotevant & Cooper, 1985). Furthermore, individual differences in identity development has been related to patterns of personological (Marcia, 1980; Constantinople, 1969), relational (Orlofsky, Marcia, & Lesser, 1973; Rasmussen, 1964) and academic (Waterman & Waterman, 1970, 1971) adjustment. The achievement of ego identity, then, has clear adaptational consequences for late adolescents, and would thus seem to be a richly informative variable through which to chart the continuity of adaptation hypothesis of adolescent attachment. This is particularly so given the role that parenting and family variables have in influencing the course of identity development.

In this study ego identity was assessed with a short measure of Eriksonian ego identity (Tan, Kendis, Fine, & Porac, 1977) and with a revised version of Rasmussen's (1964) measure developed by Enright, Lapsley, Cullen and Lallensack (1983). Both measures yield continuous data which facilitates the interpretation of path analyses (Kenny, 1979).

Parental variables (perceived paternal and maternal control) were indicated by Elder's (1962, 1963) assessment of perceived autocratic, democratic, and permissive parenting styles, and by a measure of family differentiation (Benjamin, 1979). Elder's (1962) measure has been used in previous research by Enright, Lapsley, Drivas, and Fehr (1979) who reported, in two studies, significant (positive) correlations between ego identity and paternal democratic parenting style. In the present study Elder's (1962) assessment was scored to yield a continuous measure of parenting control, with the permissive and autocratic styles representing low and high dimensions of parental control, respectively.

Benjamin (1979) has developed a model of family differentiation that attempts to describe the degree to which adolescents are able to engage in psychological separation from the family. This model represents the application of a general theory of interpersonal relations to the familial context. In this theory, levels of differentiation in parent-child relations are organized along two orthogonal dimensions, interdependence and affiliation. Interdependence describes how power, dominance, and compliance are distributed between parents and children, and is the only dimension that is required to describe differentiation. Affiliation describes the degree of support and care that is shared within the family. In the present study concern is only with the interdependence dimension since it is sufficient to describe differentiation from parents, and so it may serve as a second indicator of parental control in the structural equations modeling. According to Benjamin (1979) high levels of parental control and dominance encourage dependency, rather than psychological individuation, the latter being a prerequisite for mature identity exploration. In the present study the adolescent's ratings of both maternal and paternal control was adapted from the questionnaire that was derived from this model (Benjamin, 1979). While primarily interested in the continuity of adaptation be-

tween attachment and ego identity, two measures of parental control have been included to determine whether other family variables make an independent contribution to ego identity apart from the sense of attachment and to understand more fully the development of attachment.

METHOD

Subjects

Subjects for this study included (77) male and (24) female undergraduates, for a sample total of 101 subjects. These subjects were recruited from freshman introductory psychology sections at a small private university in the midwest.

Instruments and Procedures

Ego Identity Measures. Two measures of ego identity were employed in this study. The first measure was a revision of Rasmussen's (1964) Ego Identity Scale (EIS-R) developed by Enright et al. (1983). The EIS-R is a 30-item measure that requires subjects to make dichotomous (agree, disagree) choices about conflicts that are representative of the first five stages in Erikson's lifespan developmental theory. Each of these conflicts plays a role in identity formation, since ego identity reflects, in part, a cumulative attainment of how previous psychosocial conflicts are resolved (Erikson, 1957; Bourne, 1971). The EIS-R has been shown to have good psychometric properties (Enright et al., 1983).

Tan et al. (1977) have developed an Eriksonian measure of ego identity (EI), which was also used in the present study. This measure consists of 12 statements that reflect identity integration and 12 that indicate identity diffusion. These statements are paired in a forced-choice format. An example of one pair of statements is as follows:

> A. Because of my basic philosophy of life, I have good faith in myself and in society in general.
> B. Because of the uncertain nature of the individual and society, it is natural for one not to have a basic trust in society, in others, or even in myself.

In this example the first option is scored for identity achievement, the latter for identity diffusion. The EI measure has correlated positively with the ability to make commitments and with a Tomkins Left factor (a measure of the degree to which an individual derives values from his or her own life experiences), negatively with a measure of dogmatism, and not at all with a measure of dogmatism, and not at all with a measure of social desirability bias. The measure also enjoys adequate reliability (Tan et al., 1977).

Paternal and Maternal Control. Benjamin's (1979) measure of family differentiation was adapted for use in the present study. The dimension taps nine tracks of developmental issues: primitive basics, approach-avoidance, need fulfillment, attachment, logic/communication, attention to self-development, balance in relationships, intimacy-distance, and identity. Our adaptation of this questionnaire permit-

ted subjects to focus on their parents' action, and to report different answers for mother and father. Examples of statements from the identity track are as follows:

A. He/she lets me go and does not care what I do.
B. He/she enforces conformity to the norms he/she prefers.
C. For my own good he/she specifies and tells me what is best for me to do.
D. He/she gives me his/her blessings and leaves one to develop my own identity, separate from him/her.

In these examples B and C statements indicate a controlling parent, and the adolescent's relation to his/her parents can be characterized, in Benjamin's (1979) terminology, as interdependence. The A and D statements indicate a more differentiated relation with parents. Note that these items also reflect different levels of affiliation, in addition to interdependence. As noted above, however, affiliation and interdependence are conceived as orthogonal dimensions of family differentiation, and only the interdependence dimension is of interest in the present study.

Elder's (1962, 1963) measure of permissive, autocratic, and democratic parenting style (for both mother and father) was included as a second index of parental control. This questionnaire presents subjects with three questions that assess the manner in which decisions are made in the family. The alternatives for father are as follows:

A. I have considerable opportunity to make my own decisions, but my father has the final word (democratic).
B. I can make my own decisions, but my father would like me to consider his own opinion (permissive).
C. My father just tells me what to do (autocratic).

Subjects are required to select one parenting-style alternative (as above) for Father and one for Mother.

Parental Attachment. Armsden and Greenberg (1986) have constructed a paper-and-pencil measure of adolescent attachment to parents. The parental attachment measure includes 28 statements that assess feelings of mutual trust, understanding and respect, the accessibility, responsivity, and predictability of parents, the consistency of parents' expectations, and experiences of isolation, anxiety, or detachment from parents. Subjects are required to indicate whether each statement is *almost always true, often true, seldom true, sometimes true,* or *almost never true* of their relationship with their parents. A factor analysis suggested that three factors are tapped by this measure: *trust, communication,* and *alienation.* Examples of items from the Trust dimension are as follows:

My parents respect my feelings.

My parents help me to understand myself better.

My parents trust my judgment.

Examples of items from the Communication dimension include the following:

I like to get my parents point of view on things I'm concerned about.

My parents encourage me to talk about my difficulties.

If my parents know something is bothering me, they ask about it.

Finally, items from the Alienation dimension include:

I have to rely on myself when I have a problem to solve.

I feel angry with my parents.

I feel that no one understands me.

The attachment measure enjoys good psychometric properties (Armsden & Greenberg, 1986).

Procedure

Subjects responded to the above measures in group settings and according to standard instructions. The order of administration of the measures was completely random (for each subject) to control for order effects. The total time of test administration was approximately 50 minutes.

RESULTS

The intercorrelations among the measures are reported in Table 1. This matrix serves as the data for the structural equation iterations in a LISREL analysis (Joreskog & Sorbom, 1984). Before we report these results it will prove helpful to describe some of the core features of the structural equation methodology.

Model Description and Evaluation

Our strategy for model testing and model comparison in the present study was as follows. First, we assess the factor structure of the data with a full model that includes an over-identified measurement model and a just-identified structural model (see Kenny, 1979, on model identifications). A structural model refers to paths among latent constructs. The measurement model refers to the relation between latent constructs and their measurement indicators. The test of these models is simultaneous and indicates the adequacy of the predicted factor structure of the data to account for the observed relations. The importance of the paths in the structural model could then be assessed. These paths are assessed by a series of z-tests. A significant test statistic suggests that the path estimate is significantly different from zero, and hence that the path is an important contributor to the fit of the model.

The full model of interest in the present study is represented in Figure 1. In

TABLE 1
Correlations among Indicators

	Communication	Trust	Paternal Style	Maternal Style	Paternal Control	Maternal Control	Ego Identity-1	Ego Identity-2
Parenting Measures								
Alienation	−.63[1]	−.66[1]	.14	.15	.22[1]	.19[1]	−.25[1]	−.36
Communication[2]	–	.81[1]	−.24[1]	−.20[1]	−.24[1]	−.33[1]	.17	.26[1]
Trust[2]		–	−.27[1]	−.35[1]	−.39[1]	−.36[1]	.26[1]	.28[1]
Paternal Style[3]			–	.34[1]	.41[1]	.20[1]	−.26[1]	−.28[1]
Maternal Style[3]				–	.19[1]	.43[1]	−.15	−.12
Paternal Control[4]					–	.10	−.31[1]	−.33[1]
Maternal Control[4]						–	−.12	−.07
Identity Measures								
Ego Identity-1							–	.46[1]

[1] $p < .05$
[2] from Armsden and Greensberg (1985)
[3] from Elder (1962, 1963)
[4] from Benjamin (1979)
[5] from Enright et al. (1983)
[6] from Tan et al. (1977)

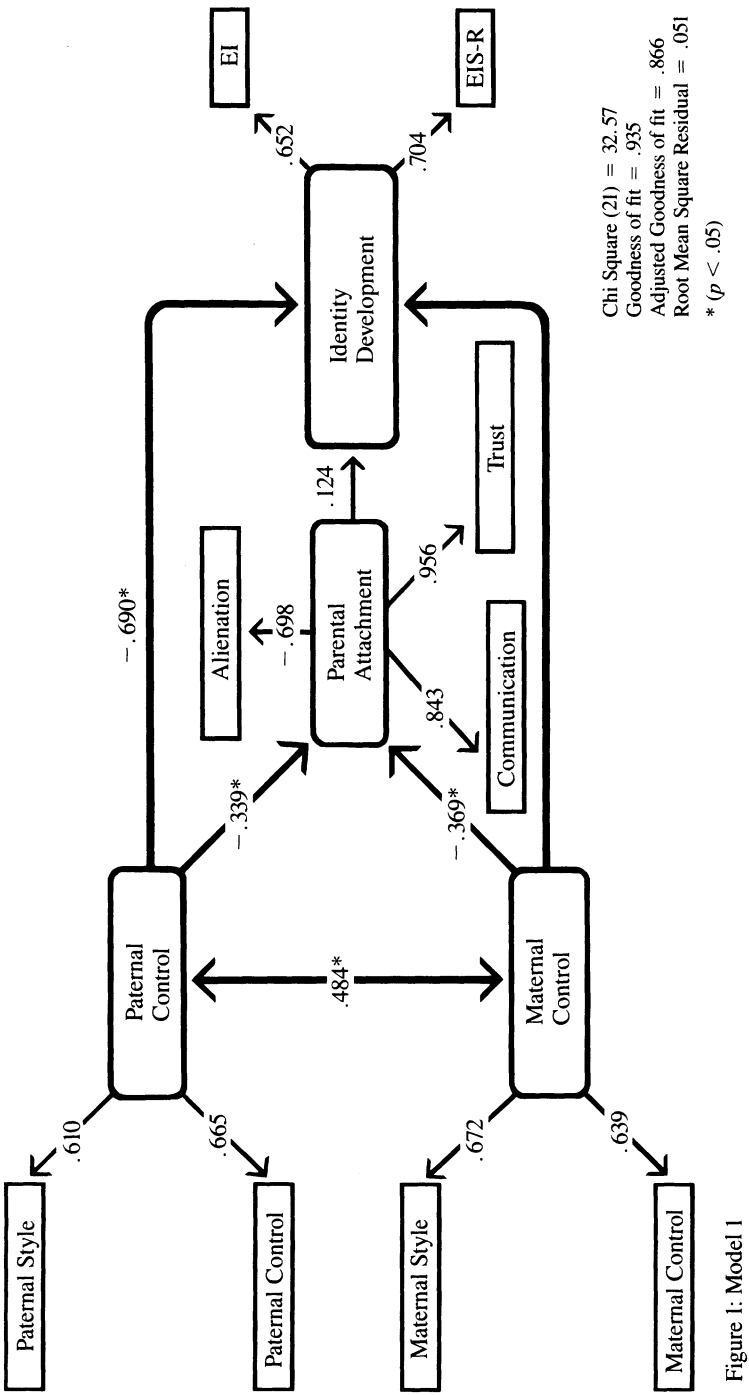


Figure 1: Model 1

Figure 1 rectangles denote the measurement indicators of theoretical constructs, which are themselves represented by ovals. Paths (arrows) represent presumed causal relationships. Note that there are paths pointing from latent constructs to observed measures. This reflects the assumption that responses to the measures are manifestations of the true construct. There are also paths between latent constructs. This suggests that variance in one construct produces variance in another. Double-headed paths represent a correlational relationship. Hence, in the present study, as structurally represented in Figure 1, (a) paternal and maternal control are thought to be correlated constructs; (b) parental control constructs have causal relations to both attachment and to ego identity, and (c) parental attachment is causally related to ego identity.

The models are assessed by a number of goodness-of-fit indices. A description of these are as follows. The *chi-square statistic* is a test of independence between the predicted and observed relationship. Large (statistically significant) values (relative to the number of degrees of freedom, which refer to the number of free parameters) denote poor fits (i.e., independence), smaller values suggest good fits. This statistic is sensitive to sample size and to departures from normality. Therefore, indices that are not sensitive to these factors are also considered. The *goodness-of-fit index* denotes the degree to which the model accounts for the variances and covariances of the data. The *adjusted-goodness-of-fit* index is the goodness-of-fit index adjusted for degrees of freedom. This adjustment eliminates any bias for models with a small number of degrees of freedom by the unadjusted index. The *root mean square residual* is the average of the square of the residuals. The statistical distributions for the latter three indices are unknown, and hence probability values cannot be assigned to the test statistics. However, a Monte Carlo study (Anderson & Gerbing, 1984) suggests that values above .90 for the goodness of fit index, above .80 for the adjusted goodness of fit index, and below .05 for the root mean square residual, are indicative of acceptable fits.

Test of the Full Model

The full model (Model 1) that is depicted in Figure 1 provided a good fit for the data: chi-square = 32.57 ($p > .05$) goodness-of-fit index = .935, adjusted goodness-of-fit index = .866 and root mean square residual = .051. The value of these goodness-of-fit indices for the full model suggest that the constructs are well defined by their indicators. Because Model 1 provided a good explanation of the data, it can be inferred that the measurement model is well-defined, and that the predicted factor structure was confirmed. An inspection of path estimates indicate that all latent constructs received at least moderately high factor loadings from their respective indicators. For example, the Elder (1963) and Benjamin (1979) measures of maternal and paternal control yielded average path estimates of .655 and .630, respectively. The parental attachment subscales, Communication, Trust, and Alienation loaded .843, .956, and −.698, respectively, onto the latent parental attachment construct. These weightings suggest that parental attachment is positively related

to Trust and Communication, and negatively related to Alienation. The identity construct received approximately equal loadings ($M = .678$) from the two identity scales.

There are also estimates for path coefficients within the structural model. For example, and as can be seen in Figure 1, the size of the path estimate between paternal and maternal control (.484) suggest that there is a moderate, positive relation between these constructs. The moderately large and negative weightings for the parental control constructs and parental attachment indicate that perceived control inhibits trust and communication and increases alienation within the family. The large, negative path estimate ($-.690$) between paternal control and ego identity suggests that paternal control strongly inhibits ego identity. The rather small path estimates between attachment and ego identity (.124) and between maternal control and identity (.150) suggest weak associations among these variables.

In sum, Figure 1 shows that (a) paternal and maternal control demonstrated similar inhibiting effects on parental attachment; (b) paternal control was counterindicative of ego identity; (c) weak or negligible links were evident between attachment and identity and between maternal control and identity, and (d) the latent constructs were well defined by their respective measures.

Having found an adequately fitted full model it is now possible to more thoroughly test the above findings by examining the z scores associated with the structural paths (see Table 2). The focus of this study was on the attachment–ego identity link. As is shown in Table 2 (also, see Figure 1), this link is nonsignificant ($z = .672$, $p > .25$). All other paths, with the exception of the maternal control–ego identity link, were significant. These findings suggest that only paternal control has a substantial, inhibiting effect on ego identity; whereas both paternal and maternal control have negative effects on attachment. Attachment has a negligible effect on identity development.

A further test of the identity–attachment link was performed by testing a second model that did not include this path. This identity–attachment path was set to zero because, as noted above, the z-test associated with this path indicated that the path estimate was not significantly different from zero. This model is reported in Figure 2. This model was fitted for the data and assessed by the various goodness-of-fit indices. The goodness-of-fit indices (see Figure 2) suggested that this model provided a viable account of the observed data. The fact that this reduced model, which is absent the path between attachment and identity, continues to provide a good fit of the data, further suggests that the removed path is not an important contributor to the fit of the model. Hence, the small relationship between attachment and identity reported in Figure 1 may be considered spurious.

The results of these tests can be summarized as follows:

1. The measurement indices provided well-defined constructs;
2. A causal relation between attachment and ego identity is not supported;
3. There is a direct association between (low) parental control and identity, an association that is not mediated by attachment; and
4. High parental control has an inhibiting effect on attachment.

TABLE 2
Z-Score Values for Model 1 and Model 2

Model 1			
	Path	Z-Score	*p*-Value
	attachment-identity	.67	$p > .25$
	paternal control-identity	−2.10	$p > .05$
	maternal control-identity	.652	$p > .25$
	paternal control-attachment	−2.05	$p > .05$
	maternal control-attachment	−2.24	$p > .05$
	paternal-maternal control	3.16	$p > .05$
Model 2			
	Path	Z-Score	*p*-Value
	paternal control-identity	−2.28	$p > .05$
	maternal control-identity	.458	$p > .25$
	paternal control-attachment	−2.50	$p > .05$
	maternal control-attachment	−2.19	$p > .05$
	paternal-maternal control	3.10	$p > .05$

DISCUSSION

The main purpose of this study was to examine the concurrent relation between adolescent attachment to parents and the achievement of ego identity. The second purpose was to examine the contribution of parental control to the formation of attachment and in the acquisition of ego identity. The results of a structural equations analysis can be summarized as follows: (a) Adolescents who perceive that their parents were highly controlling also reported a weak sense of attachment; (b) Adolescents who perceived that their fathers were controlling scored low on measures of identity achievement; and (c) There was at best a weak relation between adolescent attachment and ego identity.

Current research in adolescent attachment represents an extension of attachment theory to another period of the lifespan. However, the latter finding suggests that one fundamental feature of attachment theory, the continuity of adaptation hypothesis, cannot be easily extended to account for the acquisition of ego identity in late adolescence. That is, while adolescent attachment to parents may convey a number of other advantages for adolescent development (e.g., Greenberg et al., 1983; Armsden & Greenberg, 1985; Armsden, 1986), it does not seem to contribute to identity acquistion. This would suggest that theoretical categories that are appropriate for one epoch of the lifespan have to be applied with caution to other developmental periods. As Lerner and Ryff (1978, p. 6) point out, "Theories can no longer be casually shifted from one population to another or from one time period to the next, for so doing ignores the dynamic variations within each and their resultant implications for the patterning of relatively plastic developmental processes."

The lack of empirical support for concurrent continuity of adaptation between adolescent attachment and ego identity seems to suggest, then, that the attachments of infancy and of adolescence do not have identical functions. That is, adolescent

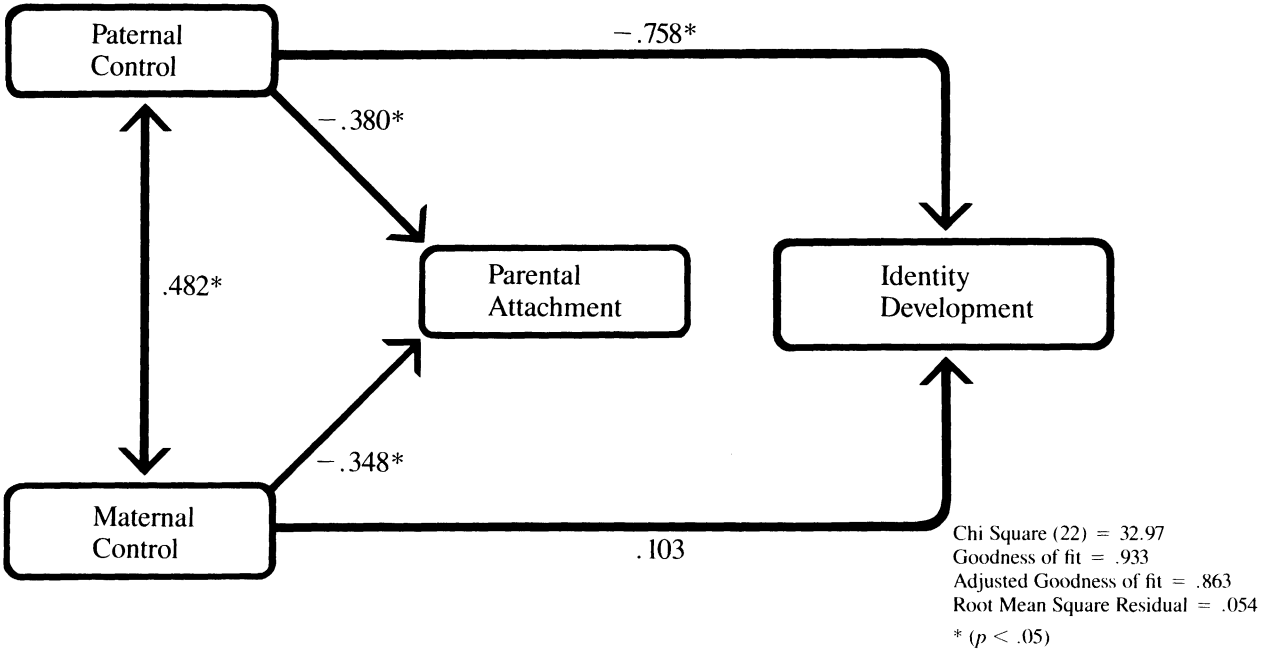


Figure 2: Model 2

attachment may reflect an organization of behavior that either has a function that is quite different from the function of infant attachment patterns, or whose function is much less critical for psychological adaptation than it is in infancy. Unlike infants, adolescents enjoy the benefits of an ontogenetic history that includes the development of advanced social and cognitive abilities, ego defenses, sublimations, favored capacities, and a much richer inner and interpersonal life. The adolescent, as a result, is not as vulnerable to the vagaries of the inanimate and social environment as is the infant, and is hence much less likely to require parental attachment to mediate adaptation. Indeed, the organization of these ontogenetic advantages may be more decisive for adolescent adaptation than is the quality of attachment to parents. We hasten to add that our analysis of the concurrent relation between adolescent attachment and ego identity leaves open the question as to whether continuity of adaptation could be better demonstrated with longitudinal data. Future research will need to attend to this question.

The failure to find an empirical relationship between attachment and identity does not suggest that family dynamics makes no contribution at all to the achievement of identity during late adolescence. In the present study high levels of paternal control was seen to inhibit ego identity development. This finding is broadly supportive of a now common theme in the adolescence literature. Previous research has shown, for example, that democratic or permissive parenting style, especially by father (Enright, et. al, 1979; Adams & Jones, 1983), and communication style within the family (Grotevant & Cooper, 1985), enhances identity exploration within the family.

A non-controlling family climate with open lines of communication allows the adolescent to more freely explore identity options. It communicates, on the one hand, that parents are emotionally available, and on the other, that the adolescent is free to individuate. As Mahler, Pine & Bergman (1975, p. 79) point out in the case of early childhood, the parents' emotional willingness to "let go of the toddler–to give him, as the mother bird does, a gentle push, an encouragement toward independence–is enormously helpful. It may even be the sine qua non of normal (healthy) individuation." There is no reason to doubt, as Lapsley and Rice (1987) point out, that a similar "gentle push" is required in adolescence in order to advance the ego identity process, but such a push is unlikely to be effected in family climates that are highly controlling. Indeed, Campbell, Adams, & Dobson (1984) found, in suport of this view, that emotional availability and the encouragement of independence strivings by parents is associated with healthy identity development.

The findings also suggest that parenting style that is highly controlling inhibits attachment to parents. That is, parents who are perceived as controlling tend to have adolescents who are less trusting of their relationship with parents and less communicative with them. While this finding is not in itself surprising, it is somewhat at variance with previous findings in the adolescent attachment literature. For example, Greenberg et al., (1983) noted that parental utilization was high even when adolescents perceived that their relationship with parents was unsatisfying. In the absence of further research these conflicting findings are difficult to reconcile. However, it

might be suggested that future research on the continuity of adaptation consider adolescents' differentiated attachment responses to *mother* and *father.* The attachment measure used in the present study yielded information on the adolescent's attachment to parents, considered jointly. This is an entirely reasonable assessment strategy given the contemporary theoretical interest in extending the study of attachment relations beyond the mother-subject dyad. However, there is reason to believe that adolescents view their relations with mother and father in different ways throughout adolescence. For example, recent research on the transformation of family relations during adolescence suggests that the re-negotiation of family roles takes place largely through the mother rather than the father (e.g., Steinberg, 1981; Lapsley, Harwell, Olson, Flannery, & Quintana, 1984; Baranowski, 1981). That is, the adolescent demand for more autonomy, equality, and reciprocity is expressed through more assertive behavior towards mother and in heightened adolescent-mother conflict. In the present study we found that adolescents who perceived that their fathers were highly controlling had more difficulty in forging an identity. If this is the case one might expect differential attachment patterns as well. It may be the case that a problematic relation with one parent may be offset (as a "protective buffering effect") by a more trusting and communicative relation with the other parent. This is an empirical question that should prove useful in clarifying the nature of adaptation in late adolescence.

REFERENCES

Adams, G., & Jones, R. (1983). Female adolescents' identity development: Age comparisons and perceived child-rearing experience. *Developmental Psychology, 19,* 249–256.

Anderson, J. C., & Gerbing, D. W. (1984). The effect of sampling error on convergence, improper solutions, and goodness-of-fit indicies for maximum likelihood confirmatory factor analyses. *Psychometrika, 49,* 155–173.

Arend, R., Gove, F., & Sroufe, L.A. (1979). Continuity of adaptation from infancy to kindergarten: A predictive study of ego-resiliency and curiosity in preschoolers. *Child Development, 50,* 950–959.

Armsen, G. (1986). Coping strategies and quality of parent and peer attachment in late adolescence. Paper presented at the first biennial meeting of the Society for Research on Adolescence, Madison, WI.

Armsden, G., & Greenberg, M. (1985). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. Unpublished manuscript.

Baranowski, M. (1981). Adolescents' attempted influence on parental behaviors. *Adolescence, 13,* 585–603.

Benjamin, L. (1979). Structural analysis of differentiation failure. *Psychiatry, 42,* 1–23.

Bourne, E. (1978a). The state of research on ego identity: Part 1. *Jounal of Youth and Adolescence, 7,* 223–251.

Bourne, E. (1978b). The state of research on ego identity: Part 2. *Journal of Youth and Adolescence, 7,* 371–392.

Bowlby, J. (1982). *Attachment and loss. Vol. I, Attachment.* New York: Basic Books.

Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psychoanalysis, 39,* 350–373.

Bretherton, I. (1985). Attachment theory: Retrospect and prospect. In I. Bretherton & E. Waters (Eds.). Growing points of attachment theory and research. *Monographs of the Society for Research in Child Development, 50,* (Serial No. 209).

Campbell, E., Adams, G. A., & Dobson, W. R. (1984). Familial correlates of identity formation in late adolescence: A study of the predictive utility of connectedness and individuality in family relations. *Journal of Youth and Adolescence, 13,* 509–525.

Constantinople, A. (1969). An Eriksonian measure of personality development in college students. *Development Psychology, 1,* 357–372.

Easterbrooks, M. A., & Lamb, M. E. (1979). The relationship between quality of infant-mother competence in initial encounter with peers. *Child Development, 50,* 380–387.

Elder, G. (1962). Structural variations in the child-rearing relationship. *Sociometry, 25,* 241–262.

Elder, G. (1963). Parental power legitimation and its effect upon the adolescent. *Sociometry, 26,* 50–65.

Enright, R., Lapsley, D., Drivas, A., & Fehr, L. (1979). Parental influences on the development of adolescent autonomy and identity. *Journal of Youth and Adolescence, 8,* 113–130.

Enright, R., Lapsley, D., Cullen, J., & Lallensack, M. (1983). A psychometric examination of Rasmussen's ego identity scale. *International Journal of Behavioral Development, 6,* 89–103.

Erikson, E. (1968). *Identity; Youth and crisis.* New York: Norton.

Greenberg, M., Siegel, J. & Leitch, C. (1983). The nature and importance of attachment relationships to parents and peers during adolescence. *Journal of Youth and Adolescence, 12,* 373.

Grotevant, H., & Cooper, C. (1985). Patterns of interaction in family relationships and the development of identity exploration in adolescence. *Child Development, 56,* 415–428.

Joreskog, K. (1974). Analyzing psychological data by structural analysis of covariance matrices. In D. Krantz, R. Atkinson, R. D. Luce, & P. Suppes (Eds.) *Measurement, psychophysics, and neural information processing* (p. 1–56). San Francisco, CA: Freeman.

Joreskog, K. G. & Sorbom, D. (1984). *LISREL VI* (3rd ed.) Mooresville, IN: Scientific Software.

Kahn, R. & Antonucci, T. (1980). Convoys over the life course: Attachments, roles, and social support. In P. Baltes & O. Brim, Jr. (Eds.). *Lifespan development and behavior,* Volume *3.* New York: Academic Press.

Kenny, D. (1979). *Correlation and causality.* New York: Wiley.

LaFreniere, P., & Sroufe, A. (1985). Profiles of peer competence in the preschool: Interrelations between measures, influence of social ecology, and relation to attachment history. *Developmental Psychology, 21,* 56–69.

Lamb, M. (1975). Fathers: Forgotton contributors to child development. *Human Development, 18,* 245–266.

Lamb, M., Thompson, R. A., Gardner, W. P., Charnov, E. L., & Estes, D. (1984). Security of infantile attachment as assessed in the "strange situation": Its study and biological interpretation. *The Behavioral and Brain Sciences, 7,* 127–171.

Lapsley, D., Harwell, M., Olson, L., Flannery, D., & Quintana, S. (1984). Moral judgement, personality, and attitude to authority in early and late adolescence. *Journal of Youth and Adolescence, 13,* 527–542.

Lapsley, D., & Rice, K. (1987). The "new look" at the imaginary audience and personal fable: Toward a general model of adolescent ego development. In D. K. Lapsley & F. C. Power (Eds.), *Self, ego and identity: Integrative approaches* (pp. 173–205). New York: Springer,

Lerner, R. M. & Ryff, C. D. (1978). Implementation of the life-span view of human development. In P. B. Baltes (Ed.), *Life-span development and behavior.* (pp. 1–44). New York: Academic Press.

Mahler, M., Pine, F., & Bergman, A. (1975). *The psychological birth of the human infant.* New York: Basic Books.

Marcia, J. (1980). Identity in adolescence. In J. Adelson (Ed.). *Handbook of adolescent psychology* (pp. 159–187). New York: Wiley.

Matas, L., Arend, R. A., & Stoufe, L. A. (1978). Continuity of adaptation in the second year: The relationship between quality of attachment and later competence. *Child Development, 49,* 547–556.

Orlofsky, J. L., Marcia, J., & Lesser, I. M. (1973). Ego identity status and the intimacy vs. isolation crisis of young adulthood. *Journal of Personality and Social Psychology, 27,* 211–219.

Rasmussen, J. (1964). Relationship of ego identity to psychosocial effectiveness. *Psychological Reports, 15,* 815–825.

Sroufe, L., & Waters, E. (1977). Attachment as an organizational perspective. *Child Development, 48,* 1184–1199.

Steinberg, L. (1981). Transformations in family relations at puberty. *Developmental Psychology, 17,* 833–840.

Tan, A., Kendis, R., Fine, J., & Porac, J. (1977). A short measure of Eriksonian ego identity. *Journal of Personality Assessment, 41,* 279–284.

Waterman, A. S., & Waterman, C. K. (1970). The relationship between ego identity status and satisfaction with college. *Journal of Educational Research, 64,* 165–168.

Waterman, A. S., & Waterman, C. K. (1971). The relationship between ego identity development at a liberal arts college. *Journal of Youth and Adolescence, 5,* 361–365.

Waters, E., Wippmann, J., & Sroufe, L. (1977). Attachment, positive affect, and competence in the peer group: Two studies in construct validation. *Child Development, 50,* 821–829.

Waters, E., & Sroufe, L. (1983). Social competence as a developmental construct. *Development Review, 3,* 79–97.

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