Rapprochement in late adolescent separation-individuation: a structural equations approach

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Adolescents' movements toward individuation are believed to be supported by secure attachments to parents. Previous research has found that individuation could be operationalized with indices of connectedness and separateness, but the relationship between these variables has not been fully explored. The present study demonstrated that attachment and differentiation variables were positively related using different and multiple operationalization procedures. Furthermore, a more comprehensive model of adolescent ego development was proposed which included parental control, individuation, and ego identity constructs. Results suggest parental control restricts successful individuation, but that adjustment on individuation indices predicts advanced identity development.

INTRODUCTION

Traditional psychoanalytic theorists have viewed adolescent development from a psychosexual perspective. This perspective argues that the main task of adolescence is the severance of early object ties to parents and the replacement of these ties with non-incestuous sexual relationships with peers (Freud, 1936). In contrast, more recent theorists view the main task of adolescence as the establishment of a sense of individuality in the context of supportive, close parental relationships (Blos, 1962; Josselson, 1980). Attachment to early objects, according to these theorists, are not replaced but rather are transformed into mature, whole object relationships through an adolescent separation-individuation process. Josselson (1988, p. 95) argues: “Because separation-individuation and relatedness are two sides of the same matrix, to focus on one to the exclusion of the other distorts under-
standing of the process”. The quality of the parent-adolescent relationship mediates ego development and this relationship is the context in which a sense of individuality is first established. Josselson (1980, p. 197) suggests that “the experience of individuation is most clear when the adolescent is most himself with others on whose ego he formerly relied”.

These contemporary theories of adolescent development are modeled after Mahler, Pine, and Bergman’s (1975) theory of separation-individuation in early childhood. Mahler et al., demarcated four major subphases of separation-individuation: differentiation, practising, rapprochement and consolidation of object-constancy. Although Josselson (1980; 1988) has shown how these subphases of ego development can be mapped onto the separation-individuation processes in adolescence, particular attention has been focused on the dynamics of rapprochement for accounting for adolescent ego development. The task of rapprochement is to develop a sense of individuality in the context of on-going relationships. This necessarily entails an integration of attachment and individuality and the concomitant resolution of the conflict between connection and psychological separateness (Josselson, 1988; Lapsley and Rice, 1988).

Throughout the separation-individuation period, adolescents progressively develop greater psychological separation from parents (Blos, 1962). This movement toward greater independence is promoted by adolescents’ growing physical, mental and interpersonal faculties (Blos, 1962). Adolescents advance through the differentiation and practising subphases until they reach a potential conflict between needs for attachment and individuality (Josselson, 1980). The challenge to adolescents and parents during rapprochement is to preserve parent/adolescent attachment bonds while simultaneously encouraging adolescents’ movements toward selfhood. Parents help preserve adolescents’ attachment during individuation by celebrating, acknowledging, respecting, and supporting the adolescents’ newly developing sense of individuality. This type of resolution allows adolescents to rely on their attachment bonds for support of their continued movements toward selfhood. The more traditional view of adolescent development as a turbulent, storm-and-stress period where adolescents attempt to sever attachments with parents is interpreted by Josselson (1980) as indicative not of normal, but of problematic adjustment.

Empirical studies support the more contemporary view of the adolescent-parent relationship. Montemayor’s (1983) review of the “storm-and-stress” literature found a notable lack of conflict between adolescents and parents. In addition, Hill and Holmbeck (1986, p. 157) suggested that adolescents “generally maintain positive cognitive and affective orientations to parents during adolescence” and that secure attachments established in childhood appear to endure through adolescence.
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Hence there is growing empirical and theoretical consensus that attachment to parents should be incorporated into theories of adolescent individuation. Indeed, Josselson (1988, p. 95) notes that "attachment is not the opposite of separation-individuation—it is coincident with it". In addition, attachment theory suggests that the quality of the relationships between adolescents and parents would contribute to the mastery of developmental tasks (Armsden, 1986; Armsden and Greenberg, 1987).

Recent studies have begun to integrate indices of attachment and individuality in operationalizing adolescent individuation. Cooper, Grotevant and their colleagues (Cooper, Grotevant and Condon, 1984; Grotevant, 1983; Grotevant and Cooper, 1985) have identified familial communication patterns that reflect adolescent individuation. These communication patterns involved statements of connectedness (sensitivity, openness, respect, and responsiveness to other's views) and separateness (self-assertion and awareness of differences among family members). It was found that communication patterns reflecting separateness and those reflecting connectedness were associated with identity exploration. Further, Campbell, Adams and Dobson (1984) found that there were different familial patterns of connectedness and individuality for the various identity statuses identified by Marcia (1966).

Although there is increasing theoretical interest in converging connectedness and individuality (or attachment and psychological differentiation from family) into theories of adolescent individuation process, there has not been a corresponding empirical convergence. Grotevant and Cooper (Cooper, Grotevant and Condon, 1984; Grotevant and Cooper, 1985) have not investigated the relationship between connectedness and individuality, nor have they empirically converged these two dimensions into a single empirical construct. On the other hand, Campbell, Adams and Dobson (1984) have examined the inter-relationship between connectedness and individuality, but they found that these two dimensions were either unrelated or negatively related—in contrast to expectation.

The main purpose of the present study is to integrate indices of connection and individuality into a single, positively related construct. The results of Campbell et al. indicate a different operationalization strategy is required. Therefore, the measurement instruments that were selected for use in the present study appear to capture the aspects of attachment and psychological differentiation from family which are consistent with Josselson (1988, p. 195) and which provide a fairer test of her prediction that "Rapprochement is about preserving bonds of relationships in the presence of increasing autonomy".

We operationalized the rapprochement process of individuation by using the Family Differentiation scale (Benjamin, 1979) and the Adolescent
Attachment to Parents measure (Armsden and Greenberg, 1987). The Family Differentiation scale was designed to capture the intrapsychic component of adolescent individuation (Benjamin, 1979). The second instrument was based on the theory of childhood attachment and adapted for use in adolescence (Armsden and Greenberg, 1987). These two instruments were selected to empirically characterize the expectation that “individuation seems to be most well integrated when it occurs in connection with rapprochement” (Josselson, 1980, p. 197).

In order to test the adaptiveness of the individuation construct as operationalized by these two measures, ego identity was selected as a criterion construct. Ego identity development is generally recognized as the principal developmental task of late adolescence. Consequently, it was expected that successful adjustment on separation-individuation variables would promote adjustment on ego identity variables (Blos, 1962). We have selected two Ego Identity scales to serve as parallel operationalizations of identity development. Both of these measures operationalize polar opposites of diffusion/integration of Eriksonian theory of identity development.

In addition, we have included measures of parenting style in our study. Previous research has found that ego identity development has been sensitive to parenting styles (Adams and Jones, 1983; Enright, Lapsley, Drivas and Fehr, 1979; Quintana and Lapsley, 1987). For our study, we posited a latent parenting style construct that was indicated by two separate instruments: Elder’s (1962; 1963) classification of parenting style and deTurck and Miller’s (1983) assessment of parental utilization of persuasion strategies. We supplemented the individuation and ego identity constructs with the parenting style construct in order to integrate previous studies, which have often investigated ego identity development with only single predictor variables (Adams and Jones, 1983; Enright et al., 1979; Grotevant and Cooper, 1985). The inclusion of multiple predictor constructs allows us to more fully examine the construct validity of the proposed individuation and parenting style constructs.

Our use of multi-operational procedures for assessing parenting style, individuation, and ego identity conveys certain methodological advantages. For example, it allows us to analyze latent factor structure by means of structural equations modeling (SEM). This data analytic technique makes it possible to remove mono-operational bias from our estimates of the latent constructs. In addition, SEM allows us to posit latent constructs and to empirically evaluate models reflecting complex patterns of inter-relationships among constructs.

We have, therefore, posited a model with three constructs (parenting style, individuation, and ego identity development) and have made the following predictions based on this model:
(1) The differentiation and attachment measures will be positively interrelated. That is, these measures will combine to form a latent individuation construct.

(2) The individuation construct will be predictive of the ego identity construct.

(3) The parenting style construct will be predictive of the individuation and ego identity constructs.

METHODS

Participants

Participants for this study included 77 male and 24 female undergraduates, for a sample total of 101 individuals. These respondents were recruited from freshman introductory psychology sections at a small private university in the Midwest.

Instruments

Parenting style measures

Two instruments were used to indicate parenting style: Elder's (1962) assessment of parenting style and deTurck and Miller's (1983) measure of parental persuasion strategies.

Elder's (1962; 1963) measure of permissive, autocratic, and democratic parenting style for mother and father was included as an index of parenting style. The items on this questionnaire address the manner in which decisions are made in the family. Respondents select one parenting-style alternative for father and one for mother. For the purposes of scoring, the three parenting styles were ordered on a dimension of control with autocratic style reflecting high parental control and permissive style, reflecting low control.

deTurck and Miller (1983) have developed a measure of the manner in which parents attempt to gain compliance from their adolescent. Respondents are presented with four situations, each of which depicts a conflict between parents and a child which are followed by 15 persuasion strategies. Respondents were asked to rate on a 4-point Likert scale the frequency with which the particular strategy was used by their parents. The points on the Likert scale range from 0 (very rarely) to 4 (quite often). For the purposes of scoring, parental control is indicated by frequent use
of parental persuasion strategies. Therefore, a total persuasion strategy score was computed by summing across ratings for all items.

**Individuation measures**

Measures of family differentiation and attachment to parents were used to represent dual, yet inter-related processes of the rapprochement processes of individuation.

Benjamin (1977; 1979) has developed a measure of family differentiation that assesses the extent to which an adolescent has satisfactorily engaged in psychological individuation from parents. Benjamin’s measure integrates the two current approaches to conceptualizing individuation: family systems and intrapsychic perspectives. Consistent with the former perspective, Benjamin’s measure includes nine items which assess parental interpersonal dispositions toward adolescents. For each of these nine items, respondents choose from four alternatives the most accurate description of their parents. The four alternatives vary across independence (parental encouragement of independence, parental enforcement of conformity) and affiliation (parental support, parental criticalness). Respondents gave separate ratings for mother and father.

Consistent with the intrapsychic perspective of individuation, Benjamin’s assessment also includes nine items assessing the adolescent’s intrapsychic, self-directed dispositions. These items also vary across independence (from spontaneous self attitudes to conforming self attitudes) and affiliation (from self-caring to self-rejecting attitudes). A respondent’s total differentiation score is the sum of all item scores across the interpersonal (mother and father) and intrapsychic domains.

Armsden and Greenberg (1987) have constructed a paper-and-pencil measure of adolescent attachment to parents which was used as a second indicator of individuation. The parental attachment measure includes 28 statements, which assess feelings of mutual trust; understanding and respect; accessibility, responsivity, and predictability of parents; the consistency of parents’ expectations; and experiences of isolation, anxiety, or detachment from parents. Respondents 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 in parents, communication with parents, and alienation from parents (Armsden and Greenberg, 1987). Consistent with Armsden and Greenberg’s (1987) methodology, a total attachment score is computed for each subject across the trust, communication, and alienation subscales. Items reflecting trust and communication are scored positively; items reflecting alienation are scored
negatively. This attachment measure enjoys good psychometric properties (Armsden and Greenberg, 1987).

Ego identity scales

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, Lapsley, Cullen, and Lallensack (1983). The EIS-R is a 30-item measure on which respondents make dichotomous (agree, disagree) choices about conflicts that are representative of the first five stages in Erikson’s lifespan developmental theory. Each of these part conflicts plays a role in identity formation, since ego identity reflects, in part, past resolutions of psychosocial conflicts (Erikson, 1957). The EIS-R has been shown to have good psychometric properties (Enright et al., 1983).

The second ego identity scale employed in this study was developed by Tan et al. (1977). 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. The EI measure 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) and negatively with a measure of dogmatism; the measure appeared to be free of a social desirability bias and enjoys adequate reliability (Tan et al., 1977).

Procedure

Participants responded to the above measures in group settings and according to standard instructions. The order of administration of these measures was completely random (for each respondent) to control for order effects. The test administration lasted for approximately 50 minutes.

RESULTS

Gender differences

Our first analysis focused on possible gender differences in the measures. It is important to rule out gender differences before proceeding with structural equations modeling. A MANOVA test indicates that there were no
significant gender differences on these variables \(F(6,93) = 1.95, p > 0.05\). However, for the purposes of structural equations modeling, it is more important to determine if the correlation equations modeling is different across gender.

A LISREL test of the equivalence of correlation matrices across gender indicated that the correlation matrices were not different across gender as indicated by clearly non-significant statistical values \(X^2(21) = 10.08, p = 0.98\); similarly, another LISREL test indicated that the predicted factor structure was equivalent across gender \(X^2(21) = 11.71, p = 0.95\). A series of univariate z-tests comparing the corresponding correlation coefficients (using \(r-z\) transformations) across gender again suggested that none of the 15 pairs of correlation coefficients was significantly different. These tests taken together support the use of structural equations modeling across all subjects.

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**Descriptive analysis**

The intercorrelations among the measures are reported in Table 1. Several observations should be made concerning the observed correlations. First, it should be noted that the family differentiation and attachment measures were positively and significantly inter-correlated \((r = 0.42, p < 0.05)\), as predicted in Hypothesis 1. Second, the pattern of correlations should be noted. Structural equations modeling is sensitive not only to the magnitude between two measures, but is affected by the pattern of relationships among all measures. Correlations between indicators measuring the same construct should be higher than correlations between indicators measuring different constructs. The observed correlation matrix is well behaved with respect to this convergent-discriminant dimension. Another requirement is that indices of the same construct have similar patterns of inter-relationships with respect to measures of other constructs. This requirement was also satisfied. For example, the parenting style and parental persuasion strategies measures behaved similarly in that these two indicators had (a) a high intercorrelation with each other, (b) had somewhat lower correlations with the individuation indicators, and (c) even lower correlations with ego identity indicators. Although the parenting style had a moderately high correlation with indices of individuation, it behaves differently than do the individuation indicators with respect to the ego identity indicators. That is, the correlations between the parenting style

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1More specific data on the tests of gender differences can be obtained from the first author. These include means, standard deviations, pearson correlations, and \(r-z\) transformations broken down by gender.
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Table 1. Correlations among indicators for all subjects

<table>
<thead>
<tr>
<th>Parenting style</th>
<th>Attachment</th>
<th>Differentiation</th>
<th>EIS-R</th>
<th>EI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Persuasion Strategy(^1)</td>
<td>0.29*</td>
<td>-0.16</td>
<td>-0.13</td>
<td>0.05</td>
</tr>
<tr>
<td>Parenting Style(^2)</td>
<td>-</td>
<td>-0.33*</td>
<td>-0.33*</td>
<td>-0.19*</td>
</tr>
<tr>
<td>Individuation Attachment to Parents(^3)</td>
<td>-</td>
<td>0.41*</td>
<td>0.25*</td>
<td>0.31*</td>
</tr>
<tr>
<td>Differentiation(^4)</td>
<td>-</td>
<td>0.32*</td>
<td>0.39*</td>
<td></td>
</tr>
<tr>
<td>Ego identity EIS-R(^5)</td>
<td>-</td>
<td>0.46*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI(^6)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

*\(p < 0.05\).

\(^1\)From deTurck and Miller (1983).
\(^2\)From Elder (1962).
\(^3\)From Armsden and Greenberg (1987).
\(^4\)From Benjamin (1979).
\(^5\)From Enright et al. (1983).
\(^6\)From Tan et al. (1977).

measure and the indicators of ego identity were consistently less strongly related (absolute value) than the correlations between the individuation indicators and the ego identity indicators. Thus, it can be seen in Table 1 that indicators of the same construct empirically behave similarly.

It is important to note that the observed correlations reported in Table 1 represent the magnitude of relationship among the measurement indices before measurement error has been removed. Structural equations modeling estimates the magnitude of relations among latent constructs after error variance is removed from the observed correlations. The goodness of fit of the models is dependent on these estimates.

Model description and evaluation

Our strategy for model testing and model comparison in the present study is as follows. First, we assess the factor structure of the data with a full model which includes an over-identified measurement model and a just-identified structural model (see Kenny 1979, on model identification). The structural model refers to paths among latent constructs. The measure-
The measurement model refers to the relation between latent constructs and their measurement indicators. Because the full model includes an over-identified measurement model, the test of the full model indicates the adequacy of the predicted factor structure to account for the observed relationships. The measurement model in this study is judged to provide a good fit for the data based on the following indices and corresponding values: a non-significant chi square statistic, goodness-of-fit index above 0.90, adjusted-goodness-of-fit index above 0.80, and a root mean square residual below 0.05 (see Anderson and Gerbing, 1984; Joreskog and Sorbom, 1984; and Fassinger, 1987 for more on goodness-of-fit indices). The structural paths are assessed by a series of z-tests. A significant z-test statistic suggests that the path estimate is significantly different from zero, and that the path makes an important contribution to the fit of the model.

The full model of interest in the present study is represented in Figure 1. In this figure, rectangles denote the measurement indicators of theoretical constructs, which are themselves represented by ovals. Paths (arrows) represent presumed direct 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. Hence, the Structural Equations Model in Figure 1 represents the following relationships: (a) parenting style has a direct effect on both individuation and ego identity constructs, and (b) individuation has a direct relationship with ego identity.

Figure 1. Goodness-of-fit tests and path estimates for Structural Equations Model. $X^2(6) = 2.81 (p = 0.832)$. Goodness of fit = 0.991; adjusted goodness of fit = 0.987. Root mean square residual = 0.029. * denotes path is significantly different from zero.
The measurement model and structural model jointly form the full model, but the test of the measurement model is equivalent to the test of the full model. This model provided a good fit for the data (see Figure 1): $X^2(6) = 2.81 (p = 0.832)$, goodness-of-fit index = 0.991, adjusted goodness of fit index = 0.987, and root mean square residual = 0.029. The values of these goodness-of-fit indices for the full model suggest that the constructs are well defined by their indicators. Because this full model 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.

**Structural model**

The structural model is assessed by inspecting the structural paths individually in the full model. The sizes of the structural paths are reported in Figure 1. Corresponding scores for the z-test are reported in Table 2. The size of the path estimate ($-0.605$) and its corresponding z-score ($z = -1.95, p = 0.051$) between parenting style and individuation suggests that a large, negative relationship exists between these constructs. The large, positive path estimate ($0.839; z = 2.09, p < 0.05$) between individuation and ego identity confirms that individuation is a strong predictor of ego identity development. Furthermore, there is a small, non-significant direct relationship between parenting style and ego identity, as indicated by the corresponding path estimate ($0.174$) and z-score ($z = 0.61, p > 0.05$).

In sum, results suggest that the posited three-factor model provided a good fit for the data. As predicted in Hypothesis 1, the two indices of the individuation construct (differentiation and attachment) were positively

<table>
<thead>
<tr>
<th>Path</th>
<th>Estimate</th>
<th>Z-Score</th>
</tr>
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<tbody>
<tr>
<td>Parenting style-individuation</td>
<td>-0.605</td>
<td>-1.95†</td>
</tr>
<tr>
<td>Parenting style-ego identity</td>
<td>0.174</td>
<td>0.61</td>
</tr>
<tr>
<td>Individuation-ego identity</td>
<td>0.837</td>
<td>2.09*</td>
</tr>
</tbody>
</table>

* $p < 0.05$.
† $p = 0.051$.

Further analyses were conducted and found to be supportive of the three-factor measurement model. These results can be obtained from the first author.

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inter-related. In support of Hypothesis 2, the individuation construct was strongly and positively associated with the ego identity construct. Lastly, in partial support of Hypothesis 3, the parenting style was directly related to individuation, but not to ego identity development; parenting style exerts its effect on ego identity indirectly through individuation.

DISCUSSION

There has been increasing interest recently in describing ego development as a joint function of attachment to parents and psychological differentiation from them. Orthodox psychoanalytic theory emphasized adolescents' needs to separate without describing the adolescents' continued attachment to parents. Recently, Blos (1962) and Josselson (1980; 1988) have characterized adolescent separation-individuation as a process wherein the parent-adolescent bond is transformed, but maintained. Grotevant and Cooper (1985) also characterized adolescent separation-individuation in terms of the twin processes of individuality and connectedness. The present study contributes to this trend by demonstrating that attachment and differentiation processes are in fact inter-related aspects of adolescent development.

Our results showed that the twin aspects of adolescent ego development, attachment and differentiation, can in fact be meaningfully combined into a single separation-individuation construct. The positive relationship observed between attachment to parents and differentiation from them suggests that adolescents maintain both a sense of communication and trust with parents while also seeking a more differentiated relationship with them. That this is adaptive is indicated by the strong, positive relationship between the ego identity and individuation constructs.

In addition, the results of this study support the model depicted in Figure 1, which suggests that parenting style variables affect individuation variables, which in turn directly affect ego identity development. Parenting styles that are based on the frequent use of controlling persuasion strategies were negatively associated with the individuation construct. That is, parenting styles reflecting high degrees of control tend to restrict adolescents' attempts to maintain the kind of attachment that is necessary in order to successfully differentiate from the family. The parenting style construct did not have a significant direct relationship on ego identity; rather, the effect of the parenting style construct on identity development was mediated by the individuation construct.

These findings put previous research in perspective. Enright et al. (1979) found a relationship between parenting style and identity development; our results suggest that parenting style-identity relation is an indirect link medi-
ated by individuation processes. Others have demonstrated that separation processes alone do not account for ego identity development (e.g., Josselson, 1980). Previous research has found that attachment variables alone were not significantly predictive of identity development (Quintana and Lapsley, 1987). The present study suggests that a multidimensional individuation construct that includes both attachment and psychological differentiation was a better predictor of ego identity than parental control. Hence, these studies taken together indicate adolescent ego development is better facilitated by attachment in the context of family differentiation than by attachment processes alone, separation processes alone, or parenting style.

Several comments are in order concerning gender issues, given that our subject sample had a predominance of males. Waterman (1982, p. 355) concluded from a review of research on identity formation that there was "far more evidence of similarities than differences" between males and females. Our results support this view. There were no significant differences between males and females on parental control, individuation and ego identity measures or in the relationships among these variables. It is, however, particularly noteworthy that indices of attachment were predictive of ego identity for a predominantly male sample, when male adolescent development has traditionally been thought to be based on separation and autonomy.

Several caveats should be noted regarding the interpretation of effects generated by structural equations modeling. First, the assumption of causality should be granted cautiously, since the correlational feature of the design is not entirely eliminated by this methodology. However, structural modeling does go beyond a correlational approach. Whereas traditional correlational analyses provide descriptive information on the degree of relationship between two variables, the structural equation technique provides an evaluation of the entire pattern of observed relationships among all variables used in this study.

This study is limited because of its general results compared to other samples and other studies, as is the case with all research. The value of the path estimates may change if constructs are measured differently or if other relevant factors are added to the model; which, of course, is applicable for all correlational, regression analyses and factor analytic studies. In addition, finding a good match between a model and the data does not rule out the possibility that there are other models which could provide a good fit for the data. The model that was evaluated in this study was constructed from theoretical foundations; however, other models based on different theoretical principles may also be able to provide a good fit for the data. This study represents only the first step in providing integrative, more comprehensive models of identity development; future studies may build on this model by integrating other important constructs.
REFERENCES


