# **BRIEF REPORT**

# The Relationship Between Identity, Intimacy, and Midlife Well-Being: Findings From the Rochester Adult Longitudinal Study

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The present study used longitudinal data on 182 adults between the ages of 20 and 54 (104 men, 78 women) from the Rochester Adult Longitudinal Study (RALS), assessed on four occasions, to test the hypothesis that identity and intimacy during the course of early and middle adulthood predict well-being at midlife. A cross-lagged panel model was estimated yielding the following findings: (a) Scores on both scales during the college years predicted midlife satisfaction—intimacy directly, and identity through the course of development from ages 20 to 54; moreover, identity in midlife, but not intimacy, was significantly linked with well-being at this same point in time; and (b) identity and intimacy unexpectedly did not predict one another over time, having been controlled for factor stability in identity and intimacy over time. The findings are discussed in terms of Erikson's psychosocial theory of development and the developmental moments and historical cohorts that characterize the present sample.

Keywords: identity, well-being, adulthood, personality, psychosocial development

According to Erikson's (1963) psychosocial developmental theory, individuals are confronted with a series of psychosocial challenges throughout their lives. These include the ability to trust others in infancy, establishing a clear sense of identity in adolescence and through the transition to adulthood, and establishing an intimate relationship with a life partner in early adulthood. Each of the eight psychosocial issues posited by Erikson contributes to the development of a basic ego strength, where an ego strength represents positive personality attributes associated with favorably resolving the tasks associated with a given psychosocial issue. As the ego strengths associated with earlier psychosocial issue resolution accumulate and become integrated into personality, the individual becomes better able to manage the emergence of subsequent psychosocial challenges. As Erikson (1968) wrote, "...the

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vital personality weathers [internal and external conflicts], reemerging from each crisis with an increased sense of inner unity, with an increase of good judgment, and an increase in the capacity 'to do well'" (p. 92). Thus, Erikson's (1963) psychosocial theory provides a coherent rubric for examining the development of well-being in middle adulthood. Although Erikson's view of a positive outcome is broadly conceived, we argue that it corresponds closely to the common understanding of the term *well-being*—which refers to a sense of happiness and satisfaction (Diener, Suh, Lucas, & Smith, 1999).

Erikson regarded the process of identity formation, along with its associated ego strength of fidelity, as the central developmental task of adolescence. Identity, as a marker of entry into adulthood (Schwartz, Côté, & Arnett, 2005), may then become a critical predictor of the development of midlife well-being. Specifically, identity consolidation in adolescence provides the first real opportunity to develop continuity with the past, meaning in the present, and direction for the future (Marcia, 1994). As such, identity consolidation forms the cornerstone of the capacity to do well and the basis of self-acceptance and self-esteem (Schwartz, 2007). The successful resolution of identity issues provides the young person with a clear sense of self, well-defined personal beliefs and values, and a feeling of place within the community (Côté & Levine, 2002). Nonetheless, the role of emerging-adult identity in the development of midlife well-being is in need of additional empirical attention.

Research on the relationship between identity and well-being in adulthood has supported the notion that a clarified self-concept plays a critical role in subsequent adaptation (e.g., Luyckx,

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Schwartz, Soenens, Vansteenkiste, & Goossens, 2010). For example, Helson, Stewart and Ostrove (1995) demonstrated that women with more resilient identities characterized themselves as comparatively more capable, able to cope with life stressors, and fulfilled in life. In another study, the achievement of a coherent sense of identity positively predicted life satisfaction, locus of control, and self-esteem, and negatively predicted depression in middle-aged women (de Haan & MacDermid, 1995). Further support for the positive relationship between identity and midlife well-being has been provided by Vandewater, Ostrove, and Stewart (1997) for women, and has been subsequently extended to late midlife (age 60) for both men and women (Vandewater & Stewart, 2006).

Broadly stated, a coherent and workable sense of identity is important both during the transition to adulthood (Schwartz, 2007) and beyond (Kokko & Pulkkinen, 2000; Whitbourne & Connolly, 1999). Identity develops as individuals transition into adult roles, such as gainful employment, committed partnerships, and parenting (Fadjukoff, Pulkkinen, & Kokko, 2005; Luyckx et al., 2010). Identity can be developed either through thoughtful consideration of alternative options, or through internalizing ideals espoused by others (Bosma & Kunnen, 2008; Kroger & Marcia, 2011). In either case, a strong sense of identity appears to facilitate well-being and satisfying committed relationships in adulthood (Zimmer-Gembeck & Petherick, 2006).

Identity is only one part of the equation in predicting midlife well-being: The second is intimacy. According to Erikson's developmental framework, having built a consolidated sense of self, the young adult is now ready to form intimate bonds with others in close, committed, long-term interpersonal relationships. Although the sequencing between identity and intimacy has been a subject of debate (Tesch & Whitbourne, 1982), it is well-accepted that identity consolidation is strongly linked with the development of true intimacy. Recent research (e.g., Beyers & Seiffge-Krenke, 2010) has indicated that identity and intimacy are closely intertwined, and that these two developmental tasks often work hand-in-hand throughout the adult years. It is not known, however, how identity and intimacy work together to predict well-being in middle adult-hood.

## The Present Study

The present study tests a model based on Erikson's theory using four waves of longitudinal data spanning 34 years from the Rochester Adult Longitudinal Study (RALS) (Whitbourne, Sneed, & Sayer, 2009). The time points were spaced approximately 11 years apart (ages 20, 31, 42, and 54). The purpose of the present study was to examine the relationship between identity and intimacy, and to determine whether the quality of the resolutions of these issues in the college years, and throughout early and middle adulthood, predict midlife well-being. We operationalized well-being in terms of subjective well-being (SWB) as a cognitive component (Diener et al., 1999) of life satisfaction. Following Vandewater et al.'s (1997) longitudinal study of psychosocial development and well-being in midlife, we assessed satisfaction with living situation (i.e., family), work, and overall life quality.

We used cross-lagged panel modeling to ascertain the predictive effects of identity and intimacy on one another over time, and on midlife well-being. Consistent with Erikson's (1950) theorizing, we hypothesized (a) that identity and intimacy would influence

one another reciprocally over time, (b) that identity and intimacy at midlife would both predict well-being at this same time point, and (c) that age-20 identity and intimacy would predict midlife well-being both directly and through stability in each process over time. That is, identity and intimacy are hypothesized to be fairly stable and interconnected developmental factors that work together to predict well-being at midlife.

## Method

## **Participants**

The present sample included 182 members (104 men, 78 women) from the oldest of three cohorts of alumni who attended the University of Rochester between the 1960s and the 1980s. They were followed on an average of 11 years between time points, in 1977–78, 1988–89, and 2000–02. Information on race and ethnicity was not obtained, and therefore the sample distribution on these variables is not known. Of the original 349 participants, 124 (35.5%) provided data only at age 20; 98 (28.1%) at two of the four study time points; 42 (12%) at three of the four study time points; and 85 (24.4%) at all four time points (see Table 1).

#### **Measures**

**Identity and intimacy.** The identity and intimacy scales used in the present study were taken from the larger Inventory of Psychosocial Development (IPD; Constantinople, 1969). The identity and intimacy subscales each consist of 10 items rated using a 7-point Likert-type response scale with 5 representing *favorable* and 1 representing *unfavorable* resolutions. Difference scores are obtained for each scale score by subtracting the summed score of the negatively worded items from the summed scores of the positively worded items. For both identity and intimacy, possible scores range from -30 to +30. Respondents indicate how *char*-

Table 1
Sample Characteristics at Each Follow-Up

	1977 Testing	1989 Testing	2000 Testing	
Age				
N	156	99	182	
M	30.66	42.64	55.09	
SD	.97	0.95	1.47	
Years of education				
M	18.06	18.56	18.88	
SD	1.68	1.67	1.94	
Occupational prestige				
M	73.81	76.66	75.34	
SD	14.44	14.48	16.46	
Relationship status (%)				
Married	105 (67)	67 (67)	120 (62)	
Cohabitating	7 (5)	5 (5)	18 (9)	
Remarried	4(3)	8 (8)	29 (15)	
Single	28 (18)	10 (10)	6 (3)	
Divorced	8 (5)	9 (9)	14 (7)	
Separated	4(3)	0 (0)	1(1)	
Widowed	0 (0)	0 (0)	3 (2)	
Parenthood status (%)				
Non-parent	76 (49)	24 (25)	33 (16)	
Parent	80 (51)	75 (75)	167 (84)	

acteristic (7) or uncharacteristic (1) a given item is of them. Sample identity subscale items include "I know who I am and what I want out of life" and "I am natural and genuine." Sample intimacy subscale items include "I am comfortable in intimate relationships" and "I am candid and not afraid to expose myself." As in previous reports on the IPD, results are presented in terms of the positive scale names, reflecting the fact that the difference scores are based on subtracting negative from positive subscale scores.

Reliabilities for the sample in 2000–02 were calculated using Cronbach's alpha, yielding values of .67 for identity and .76 for intimacy. These are consistent with previously reported values (Whitbourne, Zuschlag, Elliot, & Waterman, 1992).

**Subjective well-being.** Based on Vandewater et al.(1997), subjective well-being was measured using three items. The overall-well-being item, which was originally used in a national survey (Gurin, Veroff, & Feld, 1960), asks: "Overall, how satisfied are you with your life right now?" Respondents use a 3-point scale: *very satisfied* (3), *somewhat satisfied* (2), or *dissatisfied* (1). Satisfaction with current living situation was assessed with a 5-point scale ranging from *very dissatisfied* (1) to *very satisfied* (5). Satisfaction with current work situation was assessed with the same 5-point scale.

**Demographic information.** At ages 31, 42, and 54, participants were asked to complete a brief open-ended questionnaire that requested information on their educational, work, and family history since college graduation including dates and names of educational institutions and employers. For family history, participants provided dates of major family life events. The form of these questions was identical to the form of the questions included in the 1977 and 1989 follow-ups.

## **Procedure**

The 2000–02 RALS follow-up was initiated in November 1999, when records were obtained from the most recent edition of the University of Rochester Alumni Directory. To make it possible to request participation from individuals whose information was not listed in the directory, a fee-based service ("Find a Friend") was used to generate possible addresses from the existing information in the files. These addresses were used in May, 2000 as the basis for an initial mailing of questionnaire packets. In this first mailing, respondents were sent a letter describing the study, along with the instruments and a self-addressed, stamped envelope to be used for returning the questionnaires. The initial round of requests for participation yielded 105 participants. Subsequent efforts to locate participants took place from June 2000 until October 2002, and additional online resources were used. These efforts yielded the remaining 77 respondents. Subsequent MANOVA's comparing the IPD scores of those who completed the questionnaires in 2000 versus 2002 indicated no significant differences.

**Data analytic plan.** Tests of the study hypotheses proceeded in three steps. First, a measurement model was estimated to ascertain the feasibility of collapsing multiple indicators of well-being at age 54 (satisfaction with living situation, occupation, and life as a whole) into a single latent variable. This was accomplished via confirmatory factor analyses (CFA) using Mplus v. 6.11 (Muthén & Muthén, 1998-2011). Generally, good model fit is denoted by a nonsignificant chi-square value (for small samples or fairly simple

models), Comparative Fit Index (CFI)  $\geq$  .95; and root mean square error of approximation (RMSEA) RMSEA  $\leq$  .06 (Kline, Schmidt, & Bowles, 2006). These same fit criteria were used for the measurement model for midlife well-being and for the cross-lagged panel model as a whole.

Second, we estimated a cross-lagged panel model, with identity and intimacy allowed to predict one another across time, and with age-54 identity and intimacy allowed to predict age 54 well-being. Age-20 identity and intimacy were also allowed to predict age-54 well-being, to examine the extent to which psychosocial task resolution in young adulthood may be directly predictive of midlife well-being. At each time point, residual covariances were estimated between identity and intimacy, and autocorrelations were estimated for identity and for intimacy between adjacent sets of time points.

Finally, we evaluated the extent to which identity and intimacy at age 20 would predict midlife well-being through the course of development (e.g., identity at age 20 predicting midlife well-being through identity at ages 31, 42, and 54, and likewise for intimacy). To evaluate the significance of these over-time indirect effects, we used MacKinnon's (2008) asymmetric distribution of products test, which creates asymmetric confidence intervals for the mediated effect and has been shown to provide the most statistical power of any mediation technique (Fritz & MacKinnon, 2007). This test computes the product of the unstandardized path coefficients that comprise the mediating pathway. If the 95% confidence interval (CI) for this product does not include zero, then the indirect effect is assumed to be significant at p < .05.

## **Results**

# Measurement Model for Well-Being

A confirmatory factor analysis indicated that all three indicators of well-being loaded significantly onto a single latent construct. The loadings were .71, .76, and .95 for work satisfaction, living-situation satisfaction and overall satisfaction, respectively. Because the model was saturated (i.e., had 0 degrees of freedom), fit statistics are not reported. However, reliability for the latent construct, computed as the ratio of the variability explained by the latent variable to the total variability among the indicators (Fornell & Larcker, 1981), was .85, suggesting that the measurement model fit the data well.

# **Cross-Lagged Panel Model**

The cross-lagged panel model fit the data well,  $\chi^2(28) = 66.19$ , p < .001; Comparative Fit Index (CFI) = .95; root mean square error of approximation (RMSEA) = .063 (95% CI = .043 to .082). The autocorrelations for identity and intimacy varied across time: autocorrelations for identity ranged from .29 to .66, and autocorrelations for intimacy ranged from .48 to .57 (see Table 2). Two significant cross-lagged effects emerged: intimacy at age 31 predicted identity at age 42,  $\beta = .25$ , p < .005; and identity at age 42 predicted intimacy at age 54,  $\beta = .24$ , p < .002. Identity at age 54 was significantly associated with well-being at this same time point,  $\beta = .39$ , p < .001, but intimacy at age 54 was not,  $\beta = .10$ , p = .32. Additionally, intimacy at age 20 approached significance

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Table 2
Correlations Among Identity, Intimacy, and Well-Being Scores

	1	2	3	4	5	6	7	8	9	10	11
1. Identity at age 20	1										
2. Identity at age 31	.45**	1									
3. Identity at age 42	.48**	.48**	1								
4. Identity at age 54	.42**	.55**	.79**	1							
5. Intimacy at age 21	.58**	.34**	.39**	.33**	1						
6. Intimacy at age 31	.27**	.47**	.38**	.35**	.47**	1					
7. Intimacy at age 42	.32**	.34**	.52**	.46**	.52**	.66**	1				
8. Intimacy at age 54	.31**	.33**	.61**	.59**	.46**	.60**	.74**	1			
9. Household satisfaction	.18*	.44**	.32**	.34**	.21**	.50**	.48**	.36**	1		
<ol><li>Work satisfaction</li></ol>	.18*	.39**	.40**	.34**	.15	.30**	.35**	.23**	.45**	1	
11. Overall satisfaction	.20**	.40**	.38**	.42**	.30**	.46**	.43**	.32**	.59**	.60**	1

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed). \*\* Correlation is significant at the 0.01 level (2-tailed).

as a predictor of age-54 well-being,  $\beta$  = .18, p = .055. The cross-lagged model is shown in Figure 1.

As a final step, we tested the extent to which identity at age 20 would predict age-54 well-being through the sequence of identity autocorrelations. The 95% confidence interval for unstandardized indirect effect was .002 (95% CI = .001 to .004). The standardized indirect effect was  $\beta$  = .03. Although this coefficient appears small, it should be noted that the indirect effect consists of four paths.  $^1$ 

#### Discussion

The present longitudinal cohort study was conducted to ascertain the extent to which identity and intimacy during the course of early and middle adulthood predict well-being at midlife, as well as to examine the links between identity and intimacy over time from young to middle adulthood. The present findings point to the relevance of Erikson's psychosocial model for understanding adult psychosocial development. Specifically, two primary findings emerged from the present study. First, supporting Erikson's postulate that identity and intimacy are crucial psychosocial issues in emerging adulthood and foreshadow later development, scores on both scales during the college years predicted midlife satisfaction—intimacy directly and identity through the course of development from age 20 to age 54. Moreover, identity, but not intimacy, in midlife was significantly linked with well-being at this same point in time. Second, contrary to other findings (e.g., Beyers & Seiffge-Krenke, 2010), in most instances identity and intimacy did not predict one another over time, controlling for the stability in identity and in intimacy across time. All of these findings may be explained in terms of the developmental moments and historical cohorts that characterize the present sample.

The participants in the present sample attended college during the 1960s and 1970s, when young people commonly married in their early 20s (Cherlin, 2004). Intimacy, in the sense of establishing committed relationships that would lead to marriage, was likely extremely important during the early adult years. Whereas today's young adults are more likely to wait until their late 20s or early 30s to marry and may endure several extended romantic relationships along the way (Wiik, 2009), in the 1960s and 1970s the majority of adults in their early to mid 20s were married and had become parents (Mathews & Hamilton, 2009). The techno-

logical, economic, and social-structural changes that led to the delaying of adult responsibilities and the establishment of the emerging adult life stage had not yet occurred (Arnett, 2000; Côté, 2000), and identity issues were still more likely to be addressed in adolescence than during the college years (Schwartz, Donnellan, Ravert, Luyckx, & Zamboanga, in press). The historical era during which our participants attended college—which is characteristic of today's midlife and older adults—may explain why intimacy, and not identity, was directly linked with midlife well-being. To the extent to which individuals established a satisfying intimate relationship in their college years, they appeared to report more favorable well-being in their mid50s.

The fact that we did not find an association between identity in early adulthood and intimacy at age 31 is also likely due to the sample's historical cohort. Identity issues were likely to have been largely addressed—at least for the time being—in adolescence, before the start of our study. However, identity issues in midlife, when individuals reflect back on their lives and revisit their goals and choices (Freund & Ritter, 2009), predicted intimacy at age 54. To the extent to which individuals in their 40s continue to maintain a positive and coherent sense of who they are and where their lives are going, they are likely to continue to enjoy warm and intimate relationships in their 50s. Moreover, intimacy at age 31, when many individuals in our cohort were raising young children, predicted identity at age 42. Successfully maintaining an intimate relationship with one's partner during these child-rearing years may have predicted a more positive and coherent sense of identity throughout adulthood.

The association between identity and well-being at age 54 appears to support Erikson's (1950; 1968) focus on identity as a core psychosocial issue. Knowing who one is, and where one's life has gone and will continue to go, may be essential in midlife as well as in adolescence and early adulthood. Because the so-called

<sup>&</sup>lt;sup>1</sup> Following McArdle (2009), we originally estimated a bivariate dualchange score model. We found the slopes for identity and intimacy were highly correlated, and that this created multicolinearity problems. Given the multicolinearity that we found, we instead estimated a cross-lagged panel model, which would allow us to ascertain the directionality between identity and intimacy over time—and allowing the age-20 scores for identity and intimacy to predict age-54 well-being.

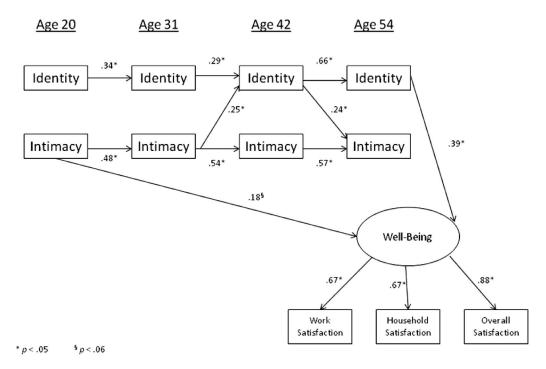


Figure 1. Cross-lagged panel model predicting age-54 well-being from college identity and intimacy.

"midlife crisis" is essentially a revisiting of identity issues in the 40s and 50s (Freund & Ritter, 2009), resolving these identity issues in a coherent and positive way appears to facilitate satisfaction with work, family, and life in general.

The present results support Erikson's (1950) contention that identity and intimacy remain important throughout the life span (see also Whitbourne et al., 2009). Although identity is most often studied in adolescents and young adults, it clearly remains important for psychosocial adjustment well into adulthood. Moreover, intimacy is critical not only for *developing* romantic relationships in young adulthood, but also for *sustaining* these relationships over time. Even if an individual does not stay with the same partner throughout one's adult years, the propensity for forming stable, open, and warm relationships with others is likely to support the establishment and maintenance of new romantic partnerships.

As individuals from the Baby Boom generation reach retirement age and reflect back on their lives—as well as on what is to come—the present results suggest that sustaining a coherent and constructive sense of self is important for continued well-being. For these individuals, and perhaps for successive generations as well, the interplay of identity and intimacy during adulthood is an essential ingredient to maintaining happiness and satisfaction. Moreover, although it is not known how today's emerging adults will make their way into midlife, the present results may provide a roadmap for how marriage or committed partnership, child rearing, and the revisiting of identity issues in middle adulthood may pave the way for a positive and satisfying journey through midlife and beyond.

## **Limitations and Future Directions**

The primary limitation of the present study was the considerable attrition in this cohort by age 54, and this attrition may have

introduced some bias into our results. For example, those participants who responded in Wave 4 of the RALS may have been more stable and generally happier than those who did not respond. However, we did not find any differences between completers and dropouts in an earlier report on these participants in which growth curves were estimated for all eight IPD scales (Whitbourne et al., 2009). Indeed, Roberts and DelVecchio (2000) did not find any effect of attrition in their meta-analysis of 152 studies, which led them to question the casting of attrition as a major distorting influence in longitudinal studies. Additionally, the present sample may permit generalizability primarily to college-educated, middle-and upper-middle-class men and women who attended private universities. Different results might have emerged for individuals who never attended college or university.

#### Conclusion

Despite the limitations of our sample, the patterns of associations observed in the present results are likely to generalize beyond our sample in a number of ways. The interplay between identity and intimacy across adulthood is consistent with Erikson's work and likely characterizes the revisiting of identity issues in early midlife, as well as the links between successful intimate partnership in early adulthood and later identity and well-being.

Moreover, in contrast to current models of positive psychology that tend to ascribe trait-like characteristics to qualities such as optimism and happiness, the present findings also suggest that changes in psychosocial development during the early and middle adult years can, in turn, provide the stimulus for well-being during midlife. Future research is needed to investigate the long-term efficacy of psychosocial, therapeutic, familial, and educational approaches that may promote development of identity and the capacity for intimacy during various phases of adulthood.

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