

# Family Dynamics in Adolescence Affect Midlife Well-Being

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This longitudinal study explores the association between family system characteristics measured during adolescence and later midlife well-being. Home interviews were held in the 1970s with 99 families with adolescents. Connection and individuation in the family system were coded from taped family interactions. Twenty-five years later, telephone interviews were conducted with 54 men and 120 women (representing 82 families) who were adolescents in the 1970s interviews. Family experiences during adolescence predicted adult well-being 25 years later. In a structural equation model, there was a direct effect of family both on the adolescents' later marriage and on well-being at midlife; for men, marriage also affected well-being. The results support the importance of connection and individuation in the adolescent family for adult well-being.

*Keywords:* longitudinal, family, connection, individuation, well-being

The family creates a primary reality for children and adolescents as they absorb their family's culture. Many theorists would agree with Litz (1992) that the models, thought patterns, expectations, and meanings absorbed in the family pervade the rest of life, both through the filtering of perceptions and through expectations of what is and what can be. The focus of this article is on the long-term effects of family experience. To what extent are those effects still relevant and measurable at midlife? Family effects have been observed in adolescence (L. G. Bell & Bell, 1982; Belsky, Lerner, & Spanier, 1984; Grotevant, 1997; Powers, Hauser, Schwartz, Noam, & Jacobson, 1983) and in young adulthood (Aquilino, 1997; White, Speisman, & Costos, 1983), but there is less research like that of Roberts and Bengtson (1993) and Rossi and Rossi (1990) that evaluates longer-term influences. The family effects described in these studies are varied but often focus on self-esteem, ego development, the ability to form relationships, and general well-being. This article explores the effect of family experiences during adolescence on midlife well-being using family connection and family individuation, measured from family interaction process, as organizing constructs.

## Connection

Children, like adults, have a fundamental need to be cherished and nurtured (Bakan, 1966; McAdams, 1989).

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The basis for this need is an attachment circuit in the brains of all mammals; in humans, the attachment circuit motivates the desire for physical contact and emotional support (D. C. Bell, 2001; Panksepp, 1998). The complementary process of caregiving is motivated by a separate brain circuit active in the parent. When the parent's caregiving is matched with the child's attachment, we observe a *connection process* that is based on warmth and the child's active dependence on the parent (Doi, 1981; Stern, 1985).

Children who receive caregiving from parents that is empathic and responsive to their needs develop internal working models that enable them to be open and secure in adolescent and adult relationships (George & Solomon, 1999; Heard & Lake, 1997). With security and support comes optimism toward life (Berman & Sperling, 1994). Higher levels of parental support (caring, closeness, affection) lead to higher self-esteem, more social competence, better psychological adjustment, and academic achievement.

## Individuation

Over much of the child's early years, the parent is focused on meeting the child's attachment needs. However, just as people have a need to be cherished and nurtured, they also have a need to be autonomous and effective (Erikson, 1963). As toddlers begin to be capable of independent action, most parents partially refocus their caregiving actions on the child's needs for autonomy and effectiveness (Brazelton & Cramer, 1990; Mahler, Pine, & Bergman, 1975). We refer to the combination of parental caregiving with child autonomy as an *individuation process*. Individuation is prominent in the development of adolescents and young adults (Grotevant & Cooper, 1998). To the extent that parents promote a family system with clear interpersonal boundaries, where members are encouraged to think for themselves, speak for themselves, and accept others'

differences, children develop their capacity for autonomous action and learn how to direct their efforts effectively toward mastering the environment (Grotevant & Cooper, 1985; Kerr & Bowen, 1988). Even the experience of conflict, in the right context, can be positive, assisting in identity formation, the development of conflict resolution skills, and assertive behaviors (Holmbeck, 1996). Individuation increases as the child's assertion of ideas and feelings is met by validation and acknowledgment by the parent(s) and as family members are comfortable with individuality and with differences between them (D. C. Bell & Bell, 1983; Grotevant & Cooper, 1985). Clear interpersonal boundaries support an individuated or differentiated self and personal autonomy (Karpel, 1976; Stierlin, 1976). If an appropriate parent-child boundary is "dissolved" (Fullinwider-Bush & Jacobvitz, 1993), or if the child is triangled into the parental subsystem to stabilize or resolve a tension in the marriage (L. G. Bell, Bell, & Nakata, 2001), his or her own development may be delayed or inhibited.

To the extent that a family has clear interpersonal boundaries and that self-effectiveness needs are recognized, family members will be encouraged to think for themselves, speak for themselves, and accept others' differences; children will develop a differentiated self and a capacity for autonomous action, learning how to direct their efforts effectively toward mastering the environment, which in turn supports their sense of psychological well-being (Bohlander, 1999; Tuason & Friedlander, 2000).

Connection-Individuation Complementarity

Whereas researchers and theorists acknowledge the importance of connection, individuation, and related concepts for understanding the family individual interface (Benson & Deal, 1995), the association between connection and individuation has been theoretically problematic. Connection and individuation are sometimes described as independent processes (D. C. Bell & Bell, 1983; P. L. Bengtson & Grotevant, 1999; Grotevant & Cooper, 1998). However, they have often been conceptualized as opposite ends of one continuum, with a midrange balance between connection and individuation seen as the healthier position (Minuchin,

1974; Olson, 1993). This view is consistent with work on individuation that has emphasized parent-child conflicts and the adolescent's alienation from the warmth of the family (Winnicott, 1965). Fingerman (2001), on the other hand, considers the emotional closeness of connection and the healthy distance of parent-child individuation to be at the same end of one dimension of family health.

Whereas connection and individuation are often empirically related, we view them as separate and complementary processes. Adolescents develop both individuation and connection with respect to their parents, with well functioning young people reporting a close connection with parents while at the same time demonstrating high levels of autonomy and individuation (Apter, 1990; Cooper, 1999; Grotevant & Cooper, 1998; Hill & Holmbeck, 1986). Healthy connection (healthy parent-child caregiving/attachment relationships) supports healthy individuation in the child (Bowlby, 1969/1982; Bretherton & Munholland, 1999). Carl Whitaker has suggested that family members can only be as connected as they are separate:

We feel that the family's capacity to be intimate and caring and their capacity to be separate and divergent increase in careful synchrony. People can't risk being close unless they have the ability to be separate—it is too frightening to be deeply involved if you aren't sure you can be separate and stand on your own. They also can't risk being truly divergent and separate if they are unable to count on a residual warmth and caring to keep them together. The more forceful and independent they become, the easier it is to risk being intimate and close. The more closeness, the easier it is to risk independence. (Napier & Whitaker, 1978, p. 93)

Longitudinal Study

The work reported here comes from a prospective longitudinal study. It addresses the following question: Can the effects of the family climate during adolescence still be seen in the psychological well-being of adults 25 years later? The model includes family system measures taken from family interaction process during adolescence (connection and individuation) and measures of adult well-being at midlife (see Figure 1). Also included in the model are parental education and ego development as measures of antecedent

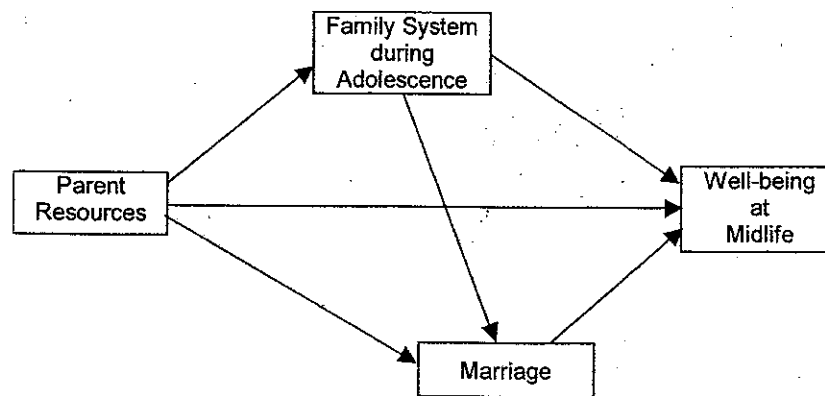


Figure 1. Adolescent family experience and midlife well-being: Theoretical model.

parental resources that contribute to the development of the family system. As many studies have shown that marriage has an impact on adult well-being (Kim & McKenry, 2002; Lee, Secombe, & Shehan, 1991; Stack & Eshleman, 1998; Waite, 2000), we included marriage in the analysis as a control to better test for the independent effects of adolescent family environment on adult well-being. We hypothesized that parental resources influence the quality of the family system during adolescence and that the family system in turn, along with marriage, influences well-being at midlife.

## Method

In the longitudinal study reported here, we relate family systems variables measured during adolescence with adult well-being measured at midlife. The quality of the family system was coded from taped family interactions during structured home interviews in the 1970s. Data on well-being at midlife were taken from telephone interviews conducted 22–27 years after the original home interviews with individuals who were adolescents during the 1970s interviews.

### Wave 1 (1975–1976)

*Sample.* Data were gathered on 99 families during structured home interviews. Families were recruited through one of three high schools in one school district; the area was White, middle class, suburban. All families had two parents and two or three children, one of whom was a 15- to 17-year-old daughter. Almost all children were biological offspring, but adoptive families were not excluded. We sought a homogeneous sample to focus on the effects of family systems revealed in the family's interaction process. Coding of family interaction process was at the time an emerging technology (Riskin & Faunce, 1972), and as we were limited to a relatively small sample, we wanted to minimize as many extraneous effects as possible (e.g., ethnicity, class, family structure) so as to increase the possibility of being able to test family system effects on individual development. Initially, a questionnaire was given to all freshmen and sophomore students in the three high schools. This questionnaire included a sociometric measure and questions about family structure. Two hundred eighty-three girls (out of 485 who were invited) agreed to participate (with parental permission) in an afterschool session in which they completed shortened forms of Loevinger's sentence completion measure of ego development (Loevinger, 1966; Loevinger & Wessler, 1970) and the California Psychological Inventory (CPI; Gough, 1987). They were paid \$2 each. Subjects were excluded from the sample if they scored higher than 31 on the Good Impression scale of the CPI (implying that they might have been falsely giving a good impression) or lower than 19 on the Communality scale (implying that they may have been answering items randomly). They also were excluded if both parents were foreign-born or if a family member had severe health problems. Of 215 eligible girls, 100 girls and their families (99 families; 2 girls were sisters) agreed to be interviewed. There were no significant differences in interviewed versus noninterviewed families on father's education, mother's education, number of children in the family, religion, or position of the identified adolescent (oldest, middle, or youngest). There was, however, a difference in the functioning of the identified adolescent as measured by the psychological and sociometric tests. Families who declined had, on average, adolescents who scored less well on a summary score of these measures

(L. G. Bell & Bell, 1982). Almost all of the parents were raised during the Depression and married after World War II. Of the fathers, 93% had graduated high school; 41% were college graduates. As for mothers, 97% had graduated high school; 18% were college graduates. The parents had stayed married and had two or three children. There were 239 adolescents, defined broadly as children aged 9 to 21 years.

*Home interview.* The home interview included questionnaires, a family revealed difference task (Strodtbeck, 1951) and a family projective exercise, the Family Paper Sculpture (L. G. Bell, 1986; L. G. Bell et al., 2004; L. G. Bell, Erickson, Cornwell, & Bell, 1991; Wedemeyer & Grotevant, 1982). The revealed difference task was based on family members' individual answers to selected items from the Family Environment Scale (Moos, 1974, 1990). Items on which family members disagreed were selected for discussion, and the family was asked to discuss these items and try to reach agreement. The same pattern of differences was used with each family, for example, mom against all, dad against all, mom and dad versus kids, mom and oldest versus dad and youngest, and so on. The Family Paper Sculpture involved family members working together to create a "picture" of their family using varied colored disks for persons, red and black lines to represent similarity and difference between individuals, and blue loops for boundary markers. Family interactions during both exercises were audiotaped, then coded for family system variables using a global coding scheme by coders trained in family systems.

*Parental resources.* Two measures of parental resources were collected at Wave 1: the education and ego development of each parent. Ego development was evaluated using Loevinger's sentence completion exercise (Loevinger & Wessler, 1970). This exercise measures stages of socioemotional development. Stages range from Presocial to Integrated. The stages represented most in our sample are self-protective (a focus on self-protection with a wary, manipulative interpersonal style), conformist (focus on belonging, group norms, social acceptability), and conscientious (differentiation of feelings, concern for self-respect, mutuality in relationships). We were originally interested in ego development as an aspect of individuation, and we predicted that parental ego development influenced adolescent ego development through particular family processes such as clear boundaries and tolerance for differences (D. C. Bell & Bell, 1983). Intercoder reliabilities, reported originally by Loevinger, range from .78 to .93 with a median of .85 (Loevinger & Wessler, 1970). Additional studies of reliability and validity include Hauser (1976) and Loevinger (1998). An 18-item version of the sentence completion measure was completed by parents at Wave 1 and scored by experienced scorers trained to criterion by Loevinger.

*Coding family interaction.* Family system variables were coded from the tape of the family interactions using the Global Coding Scheme (GCS, L. G. Bell, Cornwell, & Bell, 1983). The GCS scales were derived from the Beavers-Timberlawn Family Evaluation Scale (Lewis, Beavers, Gossett, & Phillips, 1976) and the Family Behavioral Snapshot (Meyerstein, 1979). The items of the GCS included measures of family mood, warmth, boundaries, comfort with disagreement, conflict, communication, and family health. All interaction process variables in the GCS were measured at the interval level.

Thirty-one items from the GCS, measuring family climate and interaction, were reduced by theory, factor analysis, and reliability to nine scales. The goal was to end up with theoretically meaningful scales with statistically related items and satisfactory reliabilities. The construction of scales was done in two steps. The first step was an exploratory principal components analysis. Seven components emerged in the principal components analysis with

eigenvalues greater than 1. Some components contained items that we wished to distinguish for theoretical reasons (depression vs. warmth and support; overt conflict vs. covert conflict). Guided both by theory and the component analysis, nine scales were then created, taking the mean score of the component items (see the Appendix). These scales were then tested for both internal consistency (Cronbach's alpha) and intercoder reliability (Pearson correlations). Alpha reliabilities ranged from .68 (clear interpersonal boundaries) to .92 (warmth and support), and intercoder reliabilities ranged from .44 (depression) to .75 (overt conflict).

The 9 emergent scales were then entered into a second-order principal component analysis for the second step of data reduction. Two components emerged, consisting of connection (warmth and support, depression [-], overt conflict [-], and humor) and individuation (clear interpersonal boundaries, comfort with differences and disagreements, problem solving efficiency, and covert conflict [-]). Alpha reliabilities were .81 for both connection and individuation. Intercoder reliabilities were .72 for connection and .69 for individuation.

Correlations among Wave 1 variables are shown in Table 1. These correlations are based on data from all 99 families interviewed at Wave 1.

Wave 2 (1998-2002)

*Sample.* Telephone interviews were completed with 174 now-midlife adults (former Wave 1 adolescents). We located 199 former adolescents from 82 of the 99 original families. The former adolescents were located through high school alumni directories and through old records (quite a few of the parents still lived in the same house). Of the former adolescents we located, 10 had died or were too ill to participate; 14 refused the interview either directly ( $N = 9$ ) or indirectly ( $N = 5$ ), that is, by continually postponing it. One person started the interview but then withdrew after giving only basic demographic information. Of those we contacted who were not too ill to participate, 95% of the women and 87% of the men agreed to be interviewed by phone. The analyses reported here are based on telephone interviews with these 120 women and 54 men in their late 30s or early 40s (for men,  $M = 37.6$ ,  $SD = 2.6$ ; for women,  $M = 38.1$ ,  $SD = 2.7$ ) who were adolescents during the Wave 1 family interviews. All of the subjects were high school graduates. Seventy percent of the men and 65% of the women were college graduates; 20% of the men and 27% of the women had postgraduate degrees.

*Well-being.* The Wave 2 telephone interview included two measures to evaluate well-being at midlife. The first was Ryff's well-being scale (Ryff, 1989; Ryff & Keyes, 1995), consisting of 18 statements to which respondents stated their agreement or disagreement at levels of "slight," "moderate," or "strong." The subscales of the well-being instrument are Self-Acceptance, Envi-

ronmental Mastery, Positive Relations, Purpose in Life, Personal Growth, and Autonomy. The mean of the subscale scores was taken as a measure of general well-being. After completing this well-being instrument, interviewers asked people to rate their life on 10-point scales; they were instructed to first rate their "life now" and then their "life overall." The item was taken from V. L. Bengtson and Harootyan (1994):

Now, using a scale from 0 to 10, thinking of "0" as representing the worst possible life you could imagine and "10" as the best possible life you could imagine, what number from "0" to "10" would you use to rate your life now, at the present time? (p. 302)

Participants were then asked to rate their life overall on the same scale. A quality of life measure was created by averaging the "life now" and "life overall" scores.

*Marital status.* Marital status was also collected at Wave 2. For our analyses, we used two different marital measures: intact first marriage, defined as currently in a first marriage, and currently married, defined as the current marital status (in either a first- or later marriage). Seventy-nine percent of the women and 72% of the men were currently married; 69% of the women and 65% of the men were in a first marriage. Of Wave 2 participants, 72% were currently living with children. Ages of the children ranged from newborn to 21 ( $M = 8.3$ ,  $SD = 4.4$ ). For the purpose of our analyses, persons self-identified as being in a committed relationship (who said they lived with a partner, mate, husband, or wife) were coded as married.

*Plan of analysis.* The primary analysis consists of a two-sample structural equation model (SEM) in which parameter estimates for women are compared to parameter estimates for men. Procedures for analyzing a two-sample model involve constructing an initial model in which parameters for the two samples are constrained to be equal. Diagnostic indicators are then used to improve the fit of the model to the data (Dunn, Everitt, & Pickles, 1993; Hoyle & Panter, 1995). First, Lagrange multiplier tests are used to identify those equality constraints that most limit the fit of the model to the data; removing each of these constraints improves the fit of the model. Each of these removed equality constraints indicates a significant difference between men and women, and their separate effects are estimated. Next, Wald tests are used to identify parameters that do not differ from zero. The final model then shows all parameters that are significantly different from zero and indicates those parameters that differ between men and women.

Results

Correlations among the family system, marriage, and well-being variables are shown in Table 2. The table shows

Table 1  
Correlations Among Wave 1 Variables

Variable	1	2	3	4	5	6
1. Father's education	—					
2. Father's ego development	.32**	—				
3. Mother's education	.50**	.29**	—			
4. Mother's ego development	.22*	.22*	.28**	—		
5. Family connection	.31**	.14	.31**	.20	—	
6. Family individuation	.18	.21*	.31**	.24*	.53**	—

Note.  $N = 99$  families interviewed at Wave 1.  
\*  $p < .05$ . \*\*  $p < .01$ .

Table 2  
*Correlations Between Family System, Marriage, and Well-Being for Women<sup>a</sup> and Men<sup>b</sup>*

Variable	Intact first marriage	Currently married	Well-being (Ryff)	Quality of life
Family connection	.22*/.32*	.13/.33*	.19*/-.02	.28**/.07
Family individuation	.12/.19	-.02/.18	.14/-.01	.11/.12
Intact first marriage	—	.76**/.84**	.09/.24	.16/.26
Currently married	—	—	.08/.40**	.13/.47**
Well-being (Ryff)	—	—	—	.51**/.70**

Note. Table data appearing before the slash are for women; data appearing after the slash are for men.

<sup>a</sup>  $n = 120$ . <sup>b</sup>  $n = 54$ .

\*  $p < .05$ . \*\*  $p < .01$ .

significant positive correlations for women between family connection and intact first marriage and between family connection and both well-being measures. For men, there are significant positive correlations between family connection and both marriage measures. For men, current marriage correlates significantly with both well-being measures. There seems to be less of an association between family systems measures and well-being for men than there is for women. And the pattern of correlations suggests that connection may be a better predictor of well-being for women than it is for men. For men, marriage seems to be more strongly associated with adult well-being than it is for women.

To estimate the longitudinal effects of adolescent family environment on adult well-being (see Figure 1) and to test for differences between men and women, a two-sample structural equation model (SEM) was estimated using EQS 6.1 (Bentler, 1995; Dunn et al., 1993). This model was tested on the variance-covariance matrices for women and for men. In the measurement model, one measurement effect for each theoretical construct was fixed at 1.0 to give a metric to the construct. These fixed effects could not be tested for differences between men and women. In the initial model, all measurement paths and structural effects were constrained to be equal for men and women. The initial model presented a Heywood case (negative error variances on the measure of intact marriage for women and current marriage for men), indicating a problem in estimating these measures (Hoyle & Panter, 1995). This issue was addressed by fixing these error variances to zero.

The initial model had a chi-square of 92.76 ( $df = 70$ ,  $p = .04$ ), indicating that there were significant differences between the observed data and the proposed SEM. Two other fit indices (NNFI = .94, CFI = .95) indicated that the initial model met minimum standards for fit to the data. Nevertheless, diagnostic indicators suggested several ways to improve the model. One set of improvements to the SEM (indicated by Lagrange multiplier tests) was to relax three gender constraints in the initial model (measurement effects for family individuation and current marriage and the structural effect of marriage on well-being). These relaxed constraints meant that women and men were significantly different in these areas. These changes improved the fit of the model to the data. Additional changes (indicated by Wald

tests) improved the parsimony of the model without seriously decreasing its fit to the data by deleting effects that did not differ statistically from zero. These deletions were the effects of parental resources on marriage for men and women, the effects of parental resources on adult well-being for both women and men, and the effect of marriage on well-being for women.

The final model is shown in Figure 2. All effects were estimated as unstandardized (raw) regression parameters, and the constraints were tested on these unstandardized parameters. However, Figure 2 reports the more easily interpretable standardized effects. The final model had a chi-square of 79.80 ( $df = 72$ ,  $p = .247$ ), indicating that the predicted data given the model were not significantly different from the observed data. The final model was a significant improvement over the initial model (chi-square change = 12.96,  $df = 2$ ,  $p < .01$ ) and a very good fit to the data (NNFI = .98, CFI = .98).

The results from the SEM showed the direct effect of parental resources on the adolescent family system. There was no direct effect of parental resources on either marriage or well-being. There were, however, effects of the family system during adolescence on both marriage and midlife well-being. Neither of these effects of family environment tested significantly different for men and women (i.e., the tests of the male-female equality constraint indicated an unacceptably high probability of error if the constraint were relaxed). Even though the unstandardized effects were thus constrained to be equal, a higher variance for women in family environment and a higher variance for men in well-being resulted in a lower standardized value for men in the family-well-being effect. For men, there was also a significant effect of marriage on well-being. This effect was significantly different from the effect for women; the effect for women was not different from zero.

Significant differences between men and women were also found in the measurement model. In the final SEM, currently married was a more important marriage measure for men than for women. Also, individuation was more important to the family systems measure for men than for women. This suggests that family individuation may be more important to future well-being for men than it is for women. The reverse may be true for family connection. Whereas differences between men and women on connec-

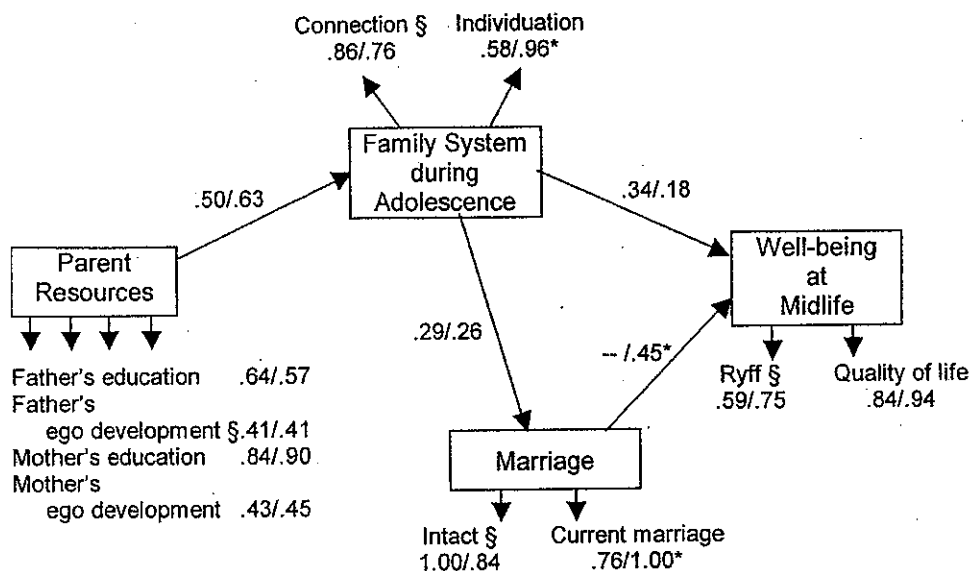


Figure 2. Adolescent family experience and midlife well-being: Final model (women/men). All coefficients shown are significantly different from zero. Asterisks (\*) indicate a significant difference in values for women and men. § indicates a measurement effect fixed at 1.0 to give a metric to the theoretical construct (and thus not tested for gender differences).

tion could not be evaluated from the SEM because the unstandardized measurement of family connection was fixed to 1.0 for men and women as a requirement of modeling, the correlations in Table 2 strongly suggest that family connection is more important for women's well-being than it is for men.

### Discussion

We hypothesized that parental resources would positively affect the adolescent family system and that the family system, along with marriage, would positively affect midlife well-being. The findings support a general conclusion that parental resources, in the form of education and ego development, impact their children through the family system that they create. As predicted, the quality of the family system during adolescence was directly associated with midlife well-being for both men and women. For women, family connection appears to be a more important aspect of the family system than it is for men, whereas the reverse is true for individuation. The data suggest that the effects of parental resources on the children's marriage and well-being are fully mediated by the quality of the family system.

There was, in addition, a direct effect of the adolescent family system on marriage. For women, the effect of the family on marriage seems to be primarily an effect on marital stability as indicated by an intact first marriage. For men, the effect of family on marriage seems to be primarily an effect on being married (at all). This implies that growing up in a connected and individuated family leads, for women, to a higher likelihood of being in a first marriage at midlife. For men, the same family experience predicts whether they are married at midlife. These results are also consistent with Marks and Lambert's finding that divorce is particularly

damaging to women's well-being (Marks & Lambert, 1998).

Marriage had a positive effect on well-being for men but no effect for women. As noted above, a large body of research has found that marriage is a consistent predictor of well-being for both men and women (Kim & McKenry, 2002; Lee et al., 1991; Stack & Eshleman, 1998; Waite, 2000). Some research, however, has suggested that men may experience a stronger benefit from marriage than do women (Coombs, 1991; Umberson, 1992). Gove, Hughes, and Style (1983) have suggested that marital status is more important to men's well-being, whereas marital quality may be more important for women. Our analysis suggests that family experience during adolescence provides a relationship backdrop for later marriage experience. In our data, adult well-being for women was not significantly predicted by marriage when adolescent family experience was controlled. For men, being married had an independent effect on well-being when controlling for family experience.

Why this difference between men and women? Cutrona (1996) makes the case that social support is critical for well-being and that differential support patterns and skills can explain the research suggesting that men benefit more from marriage than do women. She notes that women tend to be excellent sources of social support and that men are less well socialized than women to ask for help or to give it. Thus women give more support to others than do men and are more skillful than men in support transactions (Saranson, Saranson, Hacker, & Basham, 1985). Umberson suggests also that men are more likely to depend exclusively on their spouse for emotional intimacy (Umberson, Chen, House, Hopkins, & Slaten, 1996), whereas women usually receive support from a wider range of sources (e.g., family,

friends). Thus, a mate's support is more important for men because they are more dependent than are women on their mate's support to meet their needs.

There are several limitations in the reported analyses. The original sample of families was quite homogeneous: White, intact, middle-class, suburban families whose children became relatively well educated. The homogeneous sample was an intentional design decision, to examine effects of family process without the confounds of extraneous variables. This initial choice, while making the effects of the family system easier to discern in this population, at the same time limits the generalizability to other populations. We fully expect the processes that we have identified to be relevant to other families, but we cannot at this point analyze the additional relevance of ethnicity, class, or family structure.

Our theoretical model emphasized the effects on the family of parental resources measured by parent education and ego development. However, there are many effects on the family system that were not considered in this study, such as child temperament and peer influences during adolescence. For instance, we are unable to test an alternative explanation that the effect of the family system on marriage and well-being resulted from adolescent characteristics that, independent of parental resources, affected both the adolescent family and midlife well-being.

There are also several strengths in this research. One of the strengths is that the whole family was included, and family members were interviewed in their home. If the goal is to evaluate the family system, it is best to see the whole family. Also, interviewing family members in their own home makes it more likely that they will feel "at home" and fall into typical relational patterns.

Another strength is that the family measures were based on behavioral rather than self-report data. Audiotaped family interaction process was coded by coders trained in family systems concepts. Self-report data can provide important information about individual experiences, for instance, the telephone interview used in this study to collect information about well-being. Observational data can provide an outsider perspective and may allow more objective measures because the outside observer will have no motive for presenting the study families in a favorable light. An outside observer can also describe or code actual behavior on the basis of a theory-based "map" not available to those whose behavior is being described (D. C. Bell & Bell, 1989; Hampton, Beavers, & Hulgus, 1989). This is also true of theory-based projective measures such as Loewinger's sentence completion measure of ego development, which was used here to evaluate parental contributions to the family system.

Another strength is the longitudinal nature of this research—a prospective study over a period of 25 years in which a high percentage of the original sample was found and interviewed. A longitudinal study of the effects of earlier life experience on later life outcomes provides a stronger test of hypotheses concerning those effects than do self-report retrospective data in which an individual reports

how he or she is now and how he or she remembers what happened in the past. Of course, it takes a substantial commitment of time, energy, and financial resources to conduct longitudinal research, especially over a generational interval. This research would have been more difficult if the parents of the original families and their children had not been so stable and if the high schools had not kept track of graduates. Even so, the effort to locate, contact, recruit, and interview the former adolescents after an interval of over 20 years was considerable. Furthermore, it is best if such research begins relatively early in one's career so that one is better able to see the research through. Young researchers imperiled by "publish or perish" may not be able to make this early commitment.

The coding of both interaction process and projective measures can also be quite expensive in terms of time and money. But longitudinal studies involving in-home interviews, coding of behavior by outside observers, projective measures, and interviews of the whole family system can add a richness and depth to our understanding of family life.

The results of this study reinforce the importance of the family environment throughout the life course, suggesting that the family system as experienced in adolescence can have lifelong implications for well-being. Although there are a large number of experiences that occur to people after they leave their families of origin, there are effects of that family that can be detected even after an interval of 25 years.

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Appendix

Global Coding Scheme Scales and Items Included in Each Scale

Family Health

Very nonfunctional . . .to . . .*very functional*.

Warmth and Support<sup>a</sup>

The family has an atmosphere of openness, comfortableness, optimism, and warmth.

Family's mood is very cold. . .to . . .*very warm*.

Family's mood is very rejecting. . .to . . .*very supportive*.

Quality of laughter was warm and responsive (not at all . . .to . . .*very much*).

Depression<sup>a</sup>

The family has an atmosphere of depression, sadness, hopelessness.

Family's mood is *very sad*. . .to . . .*very cheerful*.

Humor<sup>a</sup>

Family's use of joking and humor (none or almost none . . .to . . .*very often*).

Amount of laughter (none or almost none. . .to . . .*very often*)

Clear Interpersonal Boundaries<sup>b</sup>

In general, members take responsibility for their own actions, feeling, and thoughts and do not take responsibility for the actions, feelings, or thoughts of others.

The family has an atmosphere overly close, stuck, overconcerned with each other (-).

Is the family's image of itself congruent with reality? Do they

see themselves as they really are? *Very congruent*. . .to . . .*very incongruent*.

Comfort With Differences and Disagreement<sup>b</sup>

Family seems comfortable with differences or disagreements.

Family seems to avoid differences and disagreements (-).

Overt Conflict<sup>a</sup>

Overt conflict in the family is *severe; impairs group functioning*. . .to . . .little or none.

Covert Conflict<sup>b</sup>

Covert conflict in the family is *severe; impairs group functioning*. . .to . . .little or none.

How openly were feelings expressed? Very directly or openly . . .to . . .*very indirectly or covertly*.

Rate family as to clarity (not intensity) of disclosure of feelings and thoughts. *Very vague and unclear*. . .to . . .*very clear*.

Problem-Solving Efficiency<sup>b</sup>

Family's efficiency at problem solving (being able to discuss items and arrive at mutual decision on the right answers). *Very efficient*. . .to . . .*very inefficient*.

*Note.* Each item is a family system variable coded from taped family interaction. Italicized anchors indicate the direction in which the scale was coded.

<sup>a</sup> One of four scales loading on the Connection factor. <sup>b</sup> One of four scales loading on the Individuation factor.

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