

Middle Aging in Women: Patterns of Personality Change from the 30s to the 50s

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This three-sample study focused on changes in four key features of women's personalities (identity, generativity, confident power, and concern about aging) over the course of middle age. Based on women's retrospective and concurrent feelings about their lives in their 30s, 40s, and 50s, scales were developed and validated for the four themes. We found that identity certainty, generativity, confident power, and concern about aging all were experienced as more prominent in middle age (the 40s) than in early adulthood (the 30s). We also found that these elements of personality were rated even higher in the 50s than the 40s. Scores seemed to be a function of age more than historical period or particular experiences in social roles. Scores on identity certainty, generativity, and confident power were positively related to well-being, while concern about aging was negatively related to well-being.

KEY WORDS: Middle age; women; personality development; identity; generativity.

Psychological accounts of midlife have been as conflicted as cultural images of middle-aged people. There is controversy concerning what, if anything, about personality changes after young adulthood among both men and women (see e.g., Costa & McCrae, 1980; Helson & Stewart, 1994). At one extreme, Freud's (1933/1965) theory was particularly pessimistic about the prospects of midlife development among women; he suggested that by age 30 a woman "often frightens us by her psychical rigidity and unchangeability" (pp. 134–135). Among those who believe change is possible for women—and men—during midlife, some demonstrate that this change is characterized by increased competence (see Helson, 1997, for a review); others describe it as a shift initiating a long period of decline (e.g., Clausen, 1986; Levinson, Darrow, Klein, Levinson, & McKee, 1978; Schaie & Willis, 1986; Troll, 1985).

Interestingly, a considerable body of research has documented that people, including women, expect their personalities to change in middle age, and believe that they did when asked in middle and later ages (Blumenthal & Herman, 1985; Ryff, 1989, 1991; Reinke, Ellicott, Harris, & Hancock, 1985; Ryff & Migdal, 1984; Ryff & Heincke, 1983; Woodruff & Birren, 1972). Of course, we cannot assume that retrospective and prospective reports describe the process of aging in the same way that longitudinal data would. There is evidence, for example, that young people hold stereotypes about aging and older generations that may influence their projections of themselves into the future (Slotterback, 1996; Slotterback & Saarnio, 1996). This suggests that retrospective reports may actually be more useful than projections into the future. In fact, many studies do find considerable consistency between retrospective and concurrent accounts of personality development (Harker & Solomon, 1996; Ryff, 1989; Stewart, Franz, & Layton, 1988). At the same time, some evidence suggests that retrospective accounts may overestimate the degree of change actually experienced (Woodruff & Birren, 1972), while other evidence suggests that retrospective accounts may tend to "smooth out" complex

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patterns of development to fairly simply trends (Robbins, 1963; Stewart, Franz, & Layton, 1988). In any case, retrospective accounts must inform us about individuals' subjective experience of their own aging, which is itself significant. In fact, Ryff (1991) suggests that comparison of the self in the present with the self in the past constitutes an important source of higher or lower well-being for adults (see also Suls & Mullen, 1982).

The current project uses retrospective and concurrent data from three studies of college-educated women to examine subjective changes in personality over a 20-year period. Theoretical and empirical accounts of middle age converge on four important features of midlife, particularly for women. Two of these features were identified by Erikson as elements in an overall process of adult personality development: identity and generativity. Two others have been identified by researchers (e.g., Neugarten, Clausen) as important features of midlife consciousness: confident power and concern about aging. These aspects of personality are expected to develop, or increase, over the course of middle age. Successful personality development is also generally seen as a factor supporting well-being within each life stage, while difficulties in development (e.g., in constructing an identity, or avoiding stagnation) are associated with poorer mental health (see Erikson, 1980; Jung, 1954; Levinson *et al.*, 1978). Therefore, we expect identity, generativity and confident power to facilitate well-being in middle age, and concern about aging to compromise it.

IDENTITY AS A DEVELOPMENTAL ISSUE FOR MIDLIFE WOMEN

Identity is usually thought of as an accomplishment of adolescence (Erikson, 1950). However, Erikson (1950, 1964; Erikson, Erikson, & Kivnick, 1986) proposed that women might not develop identities in late adolescence and early adulthood as men did. Instead, he argued that women developed them later, in the context of intimate relationships (which he thought came after identity for men; Erikson, 1968; see also Franz & White, 1985). The notion that identity may be important after early adulthood, perhaps especially for women, has been suggested by many studies (Grotevant, 1987; Kroger & Haslett, 1991; Waterman, 1982; Whitbourne, 1986; Whitbourne & Tesch, 1985; Whitbourne & VanManen, 1996).

Identity development appears to have important consequences for midlife well-being as well. For example, Vandewater, Ostrove, and Stewart (1997) found that women' midlife well-being was facilitated by earlier attainment of a well-articulated identity. Similarly, Hann and MacDermid (in press) found that identity development was positively related to midlife self-esteem and life satisfaction in women. In these cases, accomplishment of developmentally earlier tasks (identity formation) sets the stage for later psychological health.

GENERATIVITY

In characterizing women's personality development, Erikson suggested that they (like men) experienced a midlife generativity crisis, resulting in part from age-related social pressures to make a contribution to the next generation. This crisis results in a capacity and commitment to care—for ideas, cultural products, institutions, values, and people (see especially Erikson *et al.*, 1986). While some studies have suggested that generativity (at least some measures of it) is indeed higher in middle age than in early adulthood (see, e.g., McAdams, de St. Aubin & Logan, 1993; McAdams, Hart, & Maruna, 1998; Ochse & Plug, 1986; Peterson & Stewart, 1990; Ryff & Heincke, 1983; Ryff & Migdal, 1984; Vaillant, 1993), other studies have been equivocal (see, e.g., Gruen, 1964; MacDermid, Franz, & De Reus, 1998; McAdams *et al.*, 1993; Ryff & Migdal, 1984; Whitbourne, Zuschlag, Elliot, & Waterman, 1992). Differences in results do not seem attributable to whether data were retrospective or concurrent, although they may be attributable to measurement differences (see Stewart & Vandewater, 1998).

The evidence concerning relationships to well-being is less clear for generativity than for identity. Measures of the felt capacity for generativity may be somewhat related to concurrent mental health (McAdams *et al.*, 1993), but since generativity is an accomplishment expected to be "complete" only by the end of middle age, it may be more strongly related to *later* mental health (Erikson, 1982). Stewart and Vandewater (1998) have reviewed evidence that is consistent with this interpretation.

CONFIDENT POWER

Neugarten and her colleagues (in Neugarten, 1968) proposed that the core of middle-aged person-

ality is made up of “executive processes” of mastery and competence (see Chiriboga, 1989, for a similar view). Recent research has confirmed both that adults of all ages share a view of middle-aged people as particularly competent, productive, and responsible (Lachman, Lewkowicz, Marcus, & Peng, 1994) and that middle-aged adults generally feel that they are more in command of themselves and their worlds than adults of other ages (Howard & Bray, 1988; Jones & Meredith, 1996). These results seem to hold in similar ways for women as they do for men (Brown & Pacini, 1993; Cartwright & Wink, 1994; Schuster, Langland, & Smith, 1993). For example, Helson and Moane (1987) reported increases in confidence, dominance, and coping skills among women in their sample between early adulthood (age 27) and middle age (age 43). Wink and Helson (1993) report similar changes in men and women between early adulthood and later middle age (age 53), although they are sharper for women. These increases in confidence and authority are often accompanied by a broader sense of well-being. Research in this area has generally relied on attributions about people of a particular age, or (for self-ratings) on cross-sectional comparisons or longitudinal data. It is unclear whether the pattern of increasing confident power in middle age characterizes retrospective views of the self.

CONCERN ABOUT AGING

It has been widely assumed that middle age ushers in a long period of decline toward death and that therefore it will be associated with an increase in thoughts about death and mortality (Becker, 1973; Clausen, 1986; Jacques, 1965; McAdams, 1985), as well as with declines in perceived physical, relational, and psychological capacities (Clausen, 1986; Levinson *et al.*, 1978; Schaie & Willis, 1986; Troll, 1985). Because of the high cultural value placed on women’s reproductive potential and activities, it has been equally widely assumed that middle age—and the associated decrease in reproduction-related demands and potential—would pose a particular challenge to women’s self-image and sense of purpose (Gergen, 1990; Mathews, 1979; Unger & Crawford, 1996; Williams, 1987). However, there is evidence that some aspects of women’s well-being (positive relations with others; personal growth) are somewhat better than men’s at all ages (see Ryff, 1989, 1991; Ryff & Keyes, 1995; Ryff & Singer, 1996), and none are worse.

Moreover, Montepare (1996) found that middle-aged women had more favorable body images, in some respects, than either younger or older women. Research in this area, as for confident power, has not tended to assess retrospective self-views.

Finally, it is generally assumed that concern about aging, especially the physical processes associated with it, is more common and age-appropriate among the elderly than the middle-aged (Ryff, 1989). Therefore, women who feel particularly concerned about aging when they are still only middle-aged, should be particularly vulnerable to lower well-being (Berscheid & Walster, 1972; Grambs, 1989; Montepare, 1996; Scarf, 1980). In contrast, those who are quite unconcerned with aging are likely to reap more psychological benefits from the other features of middle aging (see Berkun, 1983; Heilbrun, 1988).

ALTERNATIVE EXPLANATIONS FOR PERSONALITY CHANGES

Personality development in middle age might be mainly a function of the accumulation of experience—with people, with problems, with oneself—in the course of any life. Alternatively, changes in the social context, perhaps especially changes in gender roles affecting women in some cohorts more than others (see, e.g., Agronick & Duncan, 1998; Duncan & Agronick, 1995; Stewart & Healy, 1989), might account for apparent differences in patterns in our samples. Similarly, changes in individual women’s experience of social roles (e.g., in being wives and mothers, or in years of labor force participation) might be the source of changes within samples or of differences between them. To the extent possible, with limited data, we will evaluate those alternative explanations of observed personality differences.

EVALUATING HYPOTHESES ABOUT WOMEN’S MIDLIFE PERSONALITY DEVELOPMENT

We will use data from three studies of college-educated women, drawn from cohorts that graduated from college in the late 1950s and the early and late 1960s. Although it is always difficult to compare studies in which data were collected independently, and there are inevitable gaps and differences in the data available, the possibility of cross-sample replication makes it worth the trouble. For all three studies, we

will provide evidence supporting the validity of scales to assess the four personality characteristics (identity, generativity, confidence, and concern about aging) using data about women's reported feelings about their 30s, 40s, and 50s. Using a combination of concurrent and retrospective data, we will assess perceived personality change from early adulthood to middle age (30s–40s) and both perceived and actual personality change within middle age (40s–50s). We will evaluate the hypotheses that each of the four themes (identity, generativity, confident power, and concern about aging) will increase from the 30s to the 40s and from the 40s to the 50s. Next we will use data from some of the studies to try to rule out the possibility that these changes are due to historical change (via cohort) or particular social role experiences, rather than age. Finally, we will evaluate the hypotheses that more secure identities and confidence will be associated with higher midlife well-being, while a strong focus on aging will be associated with lower well-being. Generativity, since it is an age-normative preoccupation, is predicted to be less associated with well-being at this age, but should facilitate later well-being by supporting continuing personality development.

METHOD

Overview of Three Studies

The data presented in this paper are drawn from the Michigan Women's Life Paths Study (the Michigan sample), the Mills Longitudinal Study (the Mills sample), and the Smith Alumnae Study (the Smith sample). Virtually all of the women in all three studies were white and currently middle or upper class. At midlife, most had been married at least once, were mothers, had advanced degrees, and participated in the paid labor force (see Table I for data for all three

samples). In many ways, then, women in the three samples were quite similar to each other in middle age.

On the other hand, there were some differences. The three colleges are located in different regions of the country (Smith in the East, Michigan in the Midwest, and Mills in California). Moreover, two are small, private women's colleges (Smith and Mills), and the third is a large public university. Finally, although at the time of testing, women in all three samples were middle-aged, they were drawn from slightly different birth cohorts (graduating from college in 1958/60, 1964, and 1967), and were a range of ages when tested [in the Michigan sample they averaged 47 years, in the Smith sample 52, and in the Mills sample they averaged 43 and 52 years old (for two different waves)]. To the extent that results are the same despite these differences, the differences enhance our capacity to generalize from the results to a broader group of women.

Almost identical data about the subjective experience of midlife were available from the women in each of the three samples. Each of the three studies also provided additional, less directly comparable, information about the women's personalities, work lives, family lives, and experiences of midlife.

Participants

Michigan

The Michigan sample included 102 women who graduated from the University of Michigan in 1967 and who have been participants in Tangri's longitudinal study of a stratified random sample of the women in that class (Tangri, 1969, 1972; Tangri & Jenkins, 1986; 1993). The original sample was made up of 200 senior women at the University of Michigan and was drawn from a larger study of the student body (Gurin,

Table I. Demographic Characteristics of the Three Samples^a

	University of Michigan Class of 1967 (age 47; <i>N</i> = 102)	Mills College Classes of 1958/1960 (age 52; <i>N</i> = 94)	Smith College Class of 1964 (age 52; <i>N</i> = 135)
Ever married	95	89	96
Mother	86	77	88
Graduate degree	70	54	73
In paid labor force	91	78	86

^a Data are percentages (%).

1971; see Tangri, 1969, 1972, for more information). The data for this study were all drawn from the 1992–1993 assessment, when the women were, on average, 47 years old.

Mills

In 1958 and in 1960, a representative two-thirds of the senior class ($N = 144$) at Mills College participated in a study of personality characteristics and plans for the future among college women (Helson, 1967). The women were contacted again in 1963–1964, 1981, and 1989, when they were approximately 27, 43, and 52 years old (see Helson, Mitchell, & Moane, 1984, and Helson & Wink, 1992, for further details). At the age 43 and 52 follow-ups, the women were asked to assess their experiences of midlife. It is the data from these two waves [ages 43 ($N = 102$) and 52 ($N = 94$)] that we used in the current study. Eighty-nine women provided data about their experiences of midlife at both ages 43 and 52.

Smith

In 1994, at the request of members of the Smith College Class of 1964, 30th Reunion Committee, researchers at the University of Michigan began a study of the lives of the women of that class. Two hundred thirty-two women (about 35% of women who were mailed a questionnaire) completed a questionnaire that was mailed to their home by the Reunion Committee as part of their reunion preparation materials. In 1995, a second questionnaire was sent to the 232 participants to obtain more systematic personality data and it was at this time that the women completed the measure about their experience of midlife that was also administered to the Michigan and Mills samples. One hundred thirty-five women completed this follow-up questionnaire and provided sufficient data on the midlife experience measure. The group that completed the second questionnaire constitutes the core Smith sample for this study. The women were, on average, 52 years old at the time of the second questionnaire.

Attrition effects or sampling biases over the various waves of data collection in all three samples were minor or nonexistent (for further discussion, see Cole & Stewart, 1996; Jenkins, 1989, 1994; Roberts & Helson, 1997).

Measures

Feelings about Life during Middle Age

As part of the age 43 assessment of the women in the Mills sample, Helson developed a measure of “feelings about life” based on theories about adult development (see Helson & Moane, 1987; Helson & Wink, 1992). The measure included 40 statements to which participants responded on a 3-point scale indicating the extent to which they thought these statements were descriptive of their lives. They were asked to rate these 40 items for their descriptiveness “now” (in their 40s) and retrospectively, in their 30s. A modified version of this feelings about life measure was administered at the age 52 follow-up of the Mills sample. Thus, the Mills women have feelings about life data retrospectively about their 30s and concurrently for both their 40s and their 50s. In a different study about the Mills women that also relied in part on retrospective data, Harker and Solomon (1996) found that the women at midlife were indeed quite accurate in reporting their goals and values as young adults.

The original 40 items administered at the age 43 follow-up of the Mills sample were also asked of the women in the Michigan sample when they were 47 years old. They were asked for the descriptiveness of the 40 items in their 30s (retrospective) and in their 40s (concurrent). Finally, an expanded version (that added items particularly relevant to midlife and aging) of the measure was included in the Smith sample follow-up questionnaire administered at age 52. This measure asked the women to rate the descriptiveness of the items when they were in their 30s (retrospective, as for Mills and Michigan), in their 40s (retrospective, in contrast to Mills and Michigan), and in their 50s (concurrent, as for Mills at age 52).

Developing Scales from the Feelings about Life Measure

In order to derive conceptually relevant scales to assess identity, generativity, confident power, and concern about aging, we chose items from the “Feelings About Life” measure based on their theoretical significance in the literature on midlife. Identity certainty items were chosen to operationalize Erikson’s (1950/1963; 1968, 1980) concept of identity as a relatively secure and affirmed sense of a place in the social world resulting from a process of searching

and self-definition. Generativity items were similarly chosen to operationalize Erikson's notion that generativity is defined by a preoccupation with a world beyond the self, including across generations, and a desire to make a contribution (see especially Erikson *et al.*, 1986). Confident power items were chosen to operationalize notions of "executive processes" of mastery and competence (e.g., Helson & Wink, 1992; Neugarten, 1968), while items assessing concern about aging were chosen to reflect increased preoccupation with "time left" and the approach of death, and decreased physical attractiveness (Clausen, 1986; McAdams, 1985; Levinson *et al.*, 1978). Although a core of items on the scales is identical in the three samples, because there are differences we will describe the measures separately for each sample. Table II shows the items on each of the four scales, for each sample.

Michigan. The identical scales were assessed in the Michigan sample at age 47, for the 40s and the 30s. Reliabilities for the four scales were roughly comparable: consistent and adequate for both identity certainty ($\alpha = .81$ and $.85$) and generativity ($\alpha = .53$ and $.53$), which had more items; lower and more inconsistent for the two-item confident power ($\alpha = .36$ for the 30s and $.66$ for the 40s) and concern about aging ($\alpha = -.10$ for the 30s and $.23$ for the 40s) scales.

Mills. For the Mills study, we have retrospective

data about the 30s from age 43, and concurrent data about the 40s at age 43 and the 50s at age 52. Identity certainty was assessed with an 8-item, highly reliable scale ($\alpha = .83$ for the 30s, $.86$ for the 40s, and $.83$ for the 50s). Generativity was assessed with a 7-item, reasonably reliable scale ($\alpha = .62$ for the 30s and $.51$ for the 40s); it was assessed with a 5-item scale in the 50s ($\alpha = .51$). Our conception of confident power could be assessed with two items at age 43 ($\alpha = .67$ for the 30s and $.43$ for the 40s), but these items were not available at age 52. Finally, concern about aging was also assessed with only two items at both age 43 (α for the 30s was $.35$ and for the 40s was $.52$), and age 52 ($\alpha = .48$ for the 50s).

Smith. When the Smith data were collected, additional items were included that assessed confident power and concern about aging. These new items produced scales with much higher and more consistent reliabilities. Thus, the reliabilities for identity certainty ($\alpha = .83$, $.83$ and $.80$ for the three ages rated) and generativity ($\alpha = .59$, $.61$, and $.68$) were quite comparable to those for the 6-item version of confident power ($\alpha = .73$, $.77$, and $.74$) and the 5-item version of concern about aging ($\alpha = .59$, $.61$, and $.64$). These longer scales were correlated $.87$ and $.80$ at age 50 with the 2-item versions of the scales used in the Mills and Michigan samples.

In all three samples, intercorrelations (absolute value) of the four concurrent scales were generally

Table II. Items on Feelings About Life Scales^a

Identify certainty	Confident power
A sense of being my own person	Feeling powerful
Excitement, turmoil, confusion about my impulses and potential (reversed)	Feeling more confident
Coming near the end of one road and not yet finding another (reversed)	<i>Feeling I have the authority to do what I want</i>
Feeling my life is moving well	<i>Not holding back when I have something to offer</i>
Searching for a sense of who I am (reversed)	<i>Having an accurate view of my powers and limitations</i>
Wishing I had a wider scope to my life (reversed)	<i>Feeling I understand how the world and other people work</i>
Anxiety that I won't live up to opportunities (reversed)	
Feeling secure and committed	
Generativity	Concern about aging
Feeling needed by people	Looking old
Effort to ensure that younger people get their chance to develop	Thinking a lot about death
Influence in my community or area of interest	<i>Knowing there are things I'll never do</i>
A new level of productivity or effectiveness	<i>Feeling less attractive than I used to be</i>
Appreciation and awareness of older people	<i>Feeling men aren't interested in me</i>
Having a wider perspective ^b	
Interest in things beyond my family ^b	

^aItems in italics were available only for the Smith sample. All other items were available in all three samples.

^bIndicates items that were not available for the generativity scale in Mills in the 50s.

nonsignificant, among identity certainty, generativity, and concern about aging. Confident power was generally positively correlated with both identity certainty and generativity; for example, within ratings for the 40s correlations of confident power with identity certainty averaged .47 (range = .43–.52) and with generativity averaged .49 (range = .38–.64). While these correlations are moderately high, the three variables are conceptually distinct, and quite separate from concern about aging.

In the remainder of this section, we will first describe the measures that we used to assess the validity of each of the scales. We will then describe well-being measures used to test the relationship between the feelings scales and various aspects of well-being. Finally, we will describe variables we used to rule out alternative explanations of changes in midlife feelings.

Validating Identity Certainty

We used the identity achievement prototype, based on Marcia's (1966) elaboration of Erikson's theory of identity development, from the California Adult Q-sort (CAQ; Block, 1978) to assess the validity of identity certainty. This measure was available in the Michigan sample at age 47 and in the Mills sample at age 43; it was not available for the Smith sample. Interjudge reliabilities for the CAQ composites were in the recommended range (Block, 1978): for the Michigan sample at least .58 (mean = .77); in the Mills sample, at least .65 (mean = .75).

The development and validation of the identity achievement prototype is described in Mallory (1984; see also Helson, 1992; Helson, Stewart & Ostrove, 1995 for information about the use and reliability of Q-sort prototypes in these samples). Q-sort items that were judged by experts to be most characteristic of a prototypical person with an achieved identity included: values own independence; has a clear, consistent personality; has insight into own behavior. Items that were judged to be least characteristic of having an achieved identity included: is self-defeating; feels a lack of personal meaning in life; and avoids close relationships. The identity achievement score used in the present study is the correlation between the prototype and the individual participant's sort. The average identity achievement score in the Michigan sample (age 47) was .66; in the Mills sample (age 43) it was .33.

Validating Generativity

Loyola Generativity Scale. The Michigan women completed a six-item version of the Loyola Generativity Scale (McAdams & de St. Aubin, 1992), designed to measure individual differences in concerns with generativity. It includes such items as "I have important skills that I try to teach others;" "If I were unable to have children of my own, I would like to adopt;" and "I have made and created things that have had an impact on other people." Participants rated their level of agreement with the items on a 7-point scale ranging from strongly disagree to strongly agree. The original 20-item test has both high internal consistency and test-retest reliability (McAdams & de St. Aubin, 1992). The alpha reliability of the six-item version used in this study was .67. The mean was .10 (S.D. = 3.65).

Q-Sort Generativity Realization Scale. In both the Michigan and Mills samples, we also measured generativity using a scale based on Peterson's (see Peterson & Klohnen, 1995) Q-sort of the prototypically generative person. Following standard procedures (see Peterson & Klohnen, 1995 and Wink, 1992), we created a scale based on individuals' average scores on the thirteen most descriptive items from the prototype (e.g., Behaves in a giving way toward others; Is turned to for advice and reassurance; Behaves in an ethically consistent manner). This scale had an alpha of .70 in the Michigan sample (mean = 91.19, S.D. = 8.14) and .86 in the Mills sample (mean = 78.12, S.D. = 13.94).

Validating Confident Power

In the Michigan and Mills samples, we used the Dominance and Self-acceptance scales of the California Psychological Inventory (CPI; Gough, 1987) to validate confident power. High scorers on Dominance are considered confident, assertive, dominant, and task-oriented (Gough, 1987, p. 6). High scorers on Self-acceptance have good opinions of themselves and see themselves as talented and personally attractive (Gough, 1987, p. 6). Both scales have adequate reliability and validity (Gough, 1987; Helson & Moane, 1987; Helson *et al.*, 1984). The average Dominance score in the Michigan sample was 60.81 (S.D. = 10.27); in the Mills sample it was 61.41 (S.D. = 10.91). The average Self-acceptance score in the Michigan sample was 55.73 (S.D. = 8.56); in the Mills sample it was 57.67 (S.D. = 8.27).

Validating Concern about Aging

Data to validate concern about aging were available in the Smith sample only. We created a seven-item scale from six presence-absence concerns about aging (looking older, being treated as older, diminished sex life, feeling passé, things are still undone, things that will never happen), and responses to one open-ended question, "How do you feel about turning 50?" These answers were reliably coded (interrater agreement = .90) into five categories: unqualified negative (1), qualified negative, neutral, qualified positive, and unqualified positive (5). The seven items were standard-scored and summed ($\alpha = .50$).

Ruling Out Alternative Explanations

In all three samples, we used three life-experience variables—whether or not the participant was a mother, whether or not she was currently married or had a committed partner, and years of participation in the paid labor force—to explore potential experiential correlates of feelings at midlife. In the Michigan sample at age 47, 86% of the women were mothers, 84% had partners, and 91% were in the paid labor force. In the Mills sample at age 52, 77% of the women were mothers, 60% had partners, and 78% were in the paid labor force. In the Smith sample, 88% were mothers, 73% had partners, and 86% were in the paid labor force.

Measures of Well-being

We had two measures of well-being available to us across the three samples. First, we used a single-item measure of life satisfaction. In the Michigan study, the women were asked to rate their level of satisfaction with life on a 4-point scale ranging from very dissatisfied to very satisfied (mean = 3.39; S.D. = .69). A similar measure of life satisfaction (rated on a 4-point scale) was available in the Mills sample from the age 52 assessment (mean = 3.25; S.D. = .86) and in the Smith sample (at age 53, rated on a 5-point scale; mean = 4.38; S.D. = .77; see Robinson, Shaver, & Wrightsman, 1991, for discussion of single-item life satisfaction measures).

In both the Michigan (age 47) and Mills (age 43) samples the Well-being scale of the CPI was available. High scorers on Well-being feel in good physical

and emotional health, are optimistic about the future, and tend not to be concerned about health and personal problems (Gough, 1987, p. 6). The average Well-being score in the Michigan sample was 53.64 (S.D. = 5.69); in the Mills sample it was 53.51 (S.D. = 6.45).

RESULTS

Plan of Analysis

We will first present the validity correlates for each of the feelings scales available in the Michigan, Mills, and Smith samples. We will then turn to the tests in each sample of our primary expectation: All themes will increase from the 30s to the 40s and from the 40s to the 50s. We also present analyses that attempt to address the fact that age and historical time, as well as experiences in particular roles, are inevitably confounded, and we try to rule out their respective possible influence on the changes in personality we examine here. Finally, we present the correlations between the feelings scales and psychological and physical well-being.

Validity Correlates

Table III presents correlations between each of the feeling scales and conceptually related variables available in the Michigan, Mills, and Smith samples. We used concurrent data (for Michigan in the 40s, for Smith in the 50s, and for Mills in both) to validate the feelings scales with the measures available for

Table III. Validity Evidence for Feelings Scales

	Michigan	Mills	Smith
Identity certainty			
Identity achievement	.28 ^b	.31 ^b	—
Q-sort			
Generativity			
Loyola generativity	.36 ^a	—	—
Generativity Q-sort	.26 ^a	.27 ^a	—
Confident power			
CPI dominance	.40 ^b	.32 ^b	—
CPI self-acceptance	.28 ^a	.31 ^b	—
Concern about aging			
Negative feelings about getting older	—	—	.35 ^c

^a $p < .05$.

^b $p < .01$.

^c $p < .001$.

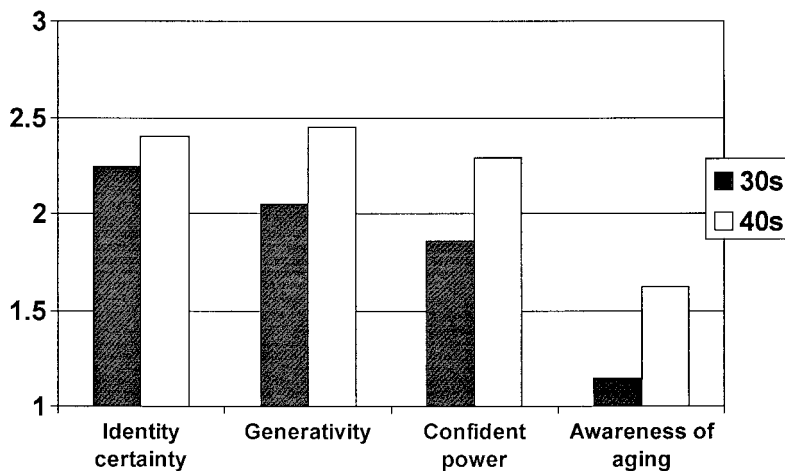


Fig. 1. Changes in feelings about life from the 30s to the 40s in the Michigan sample.

that time in each sample. The table demonstrates that across all of the samples for which we had validity correlates available, there were substantial and conceptually relevant correlates of each of the four feelings scales.

Tests of Research Questions

All Themes will Increase from the 30s to the 40s and from the 40s to the 50s

Figures 1–3 graph the means for each of the feelings scales at each of the ages for each of the samples. As we predicted, in each of the three sam-

ples, scores on identity certainty, generativity, confident power, and concern about aging were higher in the 40s than the 30s. All findings were based on retrospective data except the difference between the 40s and 50s in Mills, which were based on data from both periods. Of the 19 comparisons between the 30s and 40s and the 40s and 50s in the three samples, all were significant at the .01 level and 18 were in the predicted direction. The only finding in the unexpected direction was in the Mills sample, in which scores on generativity decreased from the 40s to the 50s. However, the measure of generativity in Mills at age 52 did not include two items that were in the age 43 measure (“Having a wider perspective” and “Interest in things beyond my family”).

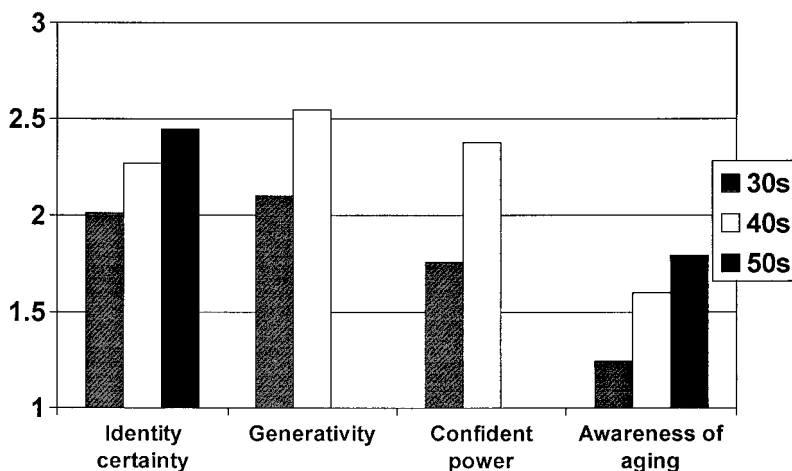


Fig. 2. Changes in feelings about life from the 30s to the 40s to the 50s in the Mills sample.

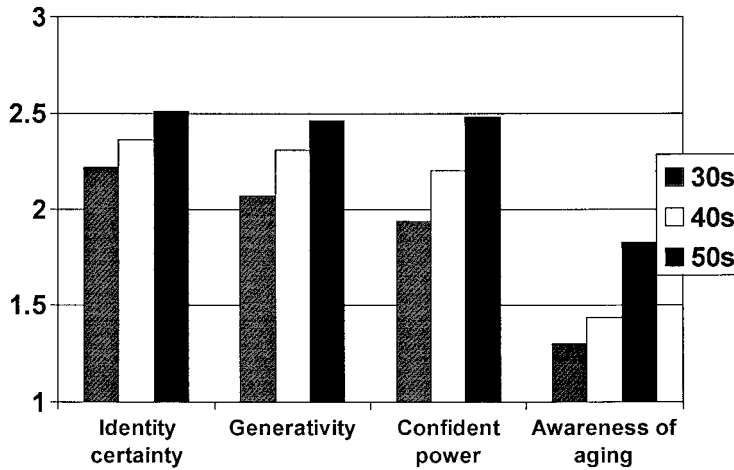


Fig. 3. Changes in feelings about life from the 30s to the 40s to the 50s in the Smith sample.

Ruling Out the Effects of Historical Time and Life Experience

The kind of data we had available for this study allowed us to rule out two alternative possibilities for the sources of changes in feelings over the course of midlife: historical time and social role experiences. Although understanding the effects of both historical time and life experience is critical to the study of adult personality development, we suspected that changes in feelings over the course of midlife were attributable to broad processes of development associated with many different life experiences.

The women in the Michigan and the Mills samples were approximately 10 years apart in age and were both assessed when they were in their 40s. The Michigan women were in their 40s in the 1990s and the Mills women were in their 40s in the 1980s. Because of this feature of the data, it was possible to assess whether levels of feelings in the 40s were a function of decade, or historical moment, rather than of age per se. In order to address this issue, we used a MANOVA to analyze the four feelings scales for differences between the two samples tested at the same age, but different historical times. There was, in fact, no main effect for sample ($F[1, 203] = 0.03, n.s.$).

Overall, there were very few differences (and no consistent patterns of difference across cohort) between mothers and nonmothers, or between women who currently had partners and those who did not, on any of the feelings scales in all three samples. Mothers in the Michigan sample had significantly higher scores on identity certainty in the

40s (mean = 2.44) than women who were not mothers (mean = 2.12, $t = 2.03, p = .05$). Mothers in the Mills sample had significantly lower scores on concerns about aging in the 50s (mean = 1.71) than women who were not mothers (mean = 2.03, $t = 2.20, p < .05$). In the Mills sample, women who had partners had higher scores on identity certainty in the 50s (mean = 2.51) than women who did not (mean = 2.29, $t = 2.27, p < .05$). There were no significant correlations between years of labor force participation (or, among the Smith women, whether or not they were in the paid labor force full time or not) and any of the feelings measures in all three samples, with one exception. In the Mills sample, years of participation in the paid labor force was significantly correlated with concerns about aging ($r = .23, p < .05$).

Relationships to Well-being

Table IV presents the correlations between each of the four feelings scales and two indexes of well-being, assessed concurrently. In all three samples, identity certainty was positively related to life satisfaction; in Michigan and Mills (the only samples in which the CPI was available), it was positively related to CPI Well-being. Generativity was related to well-being in the Smith (life satisfaction) and Mills samples (life satisfaction and CPI Well-being), but not in the Michigan sample. Finally, concern about aging was negatively related to both indicators in all samples.

Table IV. Concurrent Well-being Correlates of Feelings Scales

	Identity certainty	Generativity	Confident power	Concern about aging
Life satisfaction				
Michigan (40s)	.47 ^c	.17	.36 ^c	-.26 ^b
Mills (50s)	.59 ^c	.22 ^b	n/a	-.24 ^a
Smith (50s)	.37 ^c	.22 ^a	.26 ^b	-.18+
CPI well-being				
Michigan (40s)	.41 ^c	.02	.03	-.28 ^a
Mills (40s)	.47 ^c	.19 ^a	.26 ^b	-.38 ^c

^a*p* < .05.^b*p* < .01.^c*p* < .001.

DISCUSSION

The results of our analyses of data from all three samples supported our expectation that women felt more identity certainty, generativity, confident power, and concern about aging in their 40s (midlife) than they recalled feeling in their 30s (early adulthood). Two of the samples reported on their 40s while they were in them (43 and 47 on average), while one reported on the 40s retrospectively (from age 53). Results were equivalent in all three, despite small differences in dates of testing, the difference in retrospective versus concurrent report on the 40s, and measurement differences on two of the scales. This equivalence is all the more impressive, given several differences in the three schools from which the samples graduated: region (east coast, west coast, and midwest), selectivity, gender composition (single sex versus coeducational), and public versus private.

For the two samples with available data, we found a similar pattern from the 40s (early middle age) to the 50s (later middle age). In one, we had concurrent data in the 50s and retrospective recall of the 40s. In the other, we had the same concurrent data at both times for two of the four scales. Thus, although our evidence is limited, both women's self-perceived personality change and actual change from the 40s to 50s was similar. The only exception to the overall pattern was that on generativity Mills women scored lower in the early 50s than in the early 40s. Perhaps the slightly different measure in the 50s accounts for the lower score at that time; alternatively, generativity may show some fluctuation related to changing responsibilities for children and parents.

Ruling Out Alternatives

We attempted to rule out the impact of social history on these findings in two ways. Using data

from two samples with concurrent data about personality in the 40s in different decades (the 1980s and the 1990s), we were able to establish that there were no differences in reported feelings in the 40s in these different decades. Since women in both samples had shown identical patterns of personality change from their 30s to their 40s, and their scores were equivalent in their 40s in different decades, it is unlikely that broad social changes in these personality characteristics account for our findings.

We also attempted to rule out the impact of particular social role experiences on this process, in a limited fashion. Neither family nor work role experiences showed consistent significant effects.

Finally, as expected, identity certainty and confident power were strongly and consistently associated with midlife well-being, while concern about aging (which we view as not yet age appropriate) was generally associated with low well-being. Midlife generativity was also related to positive well-being, except in the somewhat younger Michigan sample.

These four aspects of personality seem, then, to be part of a process that marks not only transition into middle age, but also development within it. We hope that future research will be aimed at testing the notion that identity certainty is a precondition (or at least a support) for both generativity and confident power in middle age, which, in turn, may facilitate positive personality development into an old age in which concern about aging may increase, but is accompanied by other preoccupations (such as integrity, as Erikson suggested). It seems plausible that increased integration of private or self-focused concerns with identity and public preoccupations with the wider society and future generations (generativity) might enhance women's sense of efficacy and authority (confident power). This integrated process of self-possession and worldly contribution should be accompanied by a recognition of the aging process

that is realistic, but falls short of “concern.” A dynamic model of change over time in the balance of preoccupations into, during and out of middle age can only be tested with data collected at several points.

Extending These Findings

The evidence presented in this paper points in many directions for further research. First, it is important to evaluate the degree to which these findings are particular to women, or to people with educational, material, and race privilege. We suspect that there may be some ways in which the model does apply to other groups and other ways in which it may be particular to the women we studied. For example, gender pressures may force males, on average, to adopt a public posture of identity certainty before they have accumulated enough experience for it to be empirically based. As a result, middle age in men may involve freedom from external demands for the appearance of “confident power,” while in women it provides an opportunity for an increased experience of confident power. Individuals without the kinds of privilege the women in these studies have (poor people and people of color, for example) may show different patterns as well. For example, development of generativity might occur particularly early for some groups with strong group norms for participation in a mutually supportive community. However, we suspect that, because adulthood involves increasing mastery of skills and acquisition of knowledge for most people, the general pattern of increasing identity certainty, supporting midlife generativity and confident power, is likely to be broadly relevant.

It is also not clear whether these results are specific to the United States, where there is a particular premium on individualism. It may be that a sure sense of one’s own identity and of confident power facilitate well-being precisely because they are valued in this culture and have been at least since the 1950s, when the women in these samples were growing up. Similarly, in a society that devalues older people and glorifies youthful beauty in women, those whose attention is particularly focused on aging may have a more difficult time.

A second direction for research that this study points toward is a much more extensive inquiry into the developmental period of early adulthood that precedes the period we focused on most closely in this paper. This protracted period seems to be quite an uncomfortable one, despite popular cultural im-

ages to the contrary. It seems to us that there is a great deal more to be understood about the psychological pressures felt during the long period between “identity formation” in adolescence, and “identity certainty.” The process of developing a comfortable sense of self, in early adulthood, appears more strained than previous research and theory have suggested (see Pals, 1999, for other evidence along these lines).

Middle age in women has continued frequently to be constructed within psychology, as in the wider culture, as a negative period, despite an extensive empirical literature that was inconsistent with that view. (Bromberger & Matthews, 1996, make a similar observation about the alleged, but empirically unsupported, vulnerability of middle-aged women to melancholia.) This observation could stimulate an important project for the history of psychology. Our findings that many women feel empowered in middle age are, in fact, consistent with many findings generated over the past 30 years; perhaps it is important to ask why it has been so difficult to take them seriously.

ACKNOWLEDGMENTS

The research reported here was supported by grants from the University of Michigan Horace H. Rackham Graduate School and the NIMH (1-RO1-MH43948, an NIMH subgrant under prime grant 1-RO1-MH47408, and MH19391 T32). Computer-accessible data and copies of some of the raw data for several waves of the Michigan studies have been archived at the Henry A. Murray Research Center, Radcliffe College.

We are grateful to the participants in all three studies for their contributions of time and reflections over many years and to Sandra Tangri and Lauren Duncan for their generous collaborations in the Michigan and Smith studies. In addition, Jennifer Pals and Alyssa Zucker provided assistance with data retrieval and analysis.

REFERENCES

- Agronick, G. S., & Duncan, L. E. (1998). Personality and social change: Individual differences, life path, and importance attributed to the women’s movement. *Journal of Personality and Social Psychology*, 74, 1545–1555.
- Becker, E. (1973). *The denial of death*. NY: Free Press.
- Berkun, C. S. (1983). Changing appearance for women in the middle years of life: Trauma? In E. W. Markson (Ed.), *Older women* (pp. 11–35). Lexington, MA: Lexington Books.

- Berscheid, E., & Walster, E. (March, 1972). Beauty and the beast. *Psychology Today*, pp. 27–31.
- Block, J. (1978). *The Q-sort method in personality assessment and psychiatric research*. Palo Alto, CA: Consulting Psychologists Press. (Originally published, 1961.)
- Blumenthal, J. A., & Herman, S. (1985). Age differences in self-perceptions of Type A traits. *Journal of Consulting and Clinical Psychology*, 53, 264–266.
- Bromberger, J. T., & Matthews, K. A. (1996). A “feminine” model of vulnerability to depressive symptoms: A longitudinal investigation of middle-aged women. *Journal of Personality and Social Psychology*, 70, 591–598.
- Brown, D. R., & Pacini, R. (1993). The Vassar classes of 1929–1935: Personality patterns in college and adult life. In K. D. Hulbert & D. T. Schuster (Eds.), *Women's lives through time* (pp. 93–116). San Francisco: Jossey-Bass.
- Cartwright, L. K., & Wink, P. (1994). Personality change in women physicians from medical student years to mid-40s. *Psychology of Women Quarterly*, 18, 291–308.
- Chiriboga, D. A. (1989). Mental health at the midpoint: Crisis, challenge, or relief? In S. Hunter and M. Sundel (Eds.), *Midlife myths: Issues, findings, and practice implications* (pp. 116–144). Newbury Park, CA: Sage.
- Clausen, J. (1986). *The life course: A sociological perspective*. Englewood Cliffs, NJ: Prentice-Hall.
- Cole, E. R., & Stewart, A. J. (1996). Black and White women's political activism: Personality development, political identity and social responsibility. *Journal of Personality and Social Psychology*, 71, 130–140.
- Costa, P. T., & McCrae, R. R. (1980). Still stable after all these years: Personality as a key to some issues in adulthood and old age. In P. B. Baltes & O. G. Brim, Jr. (Eds.), *Life-span development and behavior*, Vol. 3 (pp. 65–102). New York: Academic Press.
- Duncan, L. E., & Agronick, G. S. (1995). The intersection of life stage and social events: Personality and life outcomes. *Journal of Personality and Social Psychology*, 69, 558–568.
- Erikson, E. H. (1950). *Childhood and society*. NY: Norton.
- Erikson, E. H. (1964). *Insight and responsibility*. NY: Norton.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. NY: Norton.
- Erikson, E. H. (1980). Themes of adulthood in the Freud-Jung correspondence. In N. J. Smelser & E. H. Erikson (Eds.), *Themes of work and love in adulthood* (pp. 43–74). Cambridge, MA: Harvard University Press.
- Erikson, E. H. (1982). *The life cycle completed: A review*. NY: Norton.
- Erikson, E. H., Erikson, J. M., & Kivnick, H. O. (1986). *Vital involvement in old age*. NY: Norton.
- Franz, C. E., & White, K. M. (1985). Individuation and attachment in personality development: Extending Erikson's theory. *Journal of Personality*, 53, 136–168.
- Freud, S. (1965). Femininity. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 22, pp. 112–135). London: Hogarth Press. (Original work, published 1933.)
- Gergen, M. M. (1990). Finished at 40: Women's development within the patriarchy. *Psychology of Women Quarterly*, 14, 471–494.
- Gough, H. G. (1987). *California Psychological Inventory Administrator's Guide*. Palo Alto, CA: Consulting Psychologists Press.
- Grambs, J. D. (1989). *Women over 40: Visions and realities*. New York: Springer.
- Grotevant, H. D. (1987). Toward a process model of identity formation. *Journal of Adolescent Research*, 2, 203–222.
- Gruen, W. (1964). Adult personality: An empirical study of Erikson's theory of ego development. In B. L. Neugarten, *Personality in middle and late life: Empirical studies* (pp. 1–14). New York: Atherton.
- Gurin, G. A. (1971). *A study of students in a multiversity*. Final report, contract no. OE-6-10-034. Ann Arbor, MI: Office of Education, University of Michigan.
- Hann, L. G., & MacDermid, S. M. (in press). Is women's identity achievement associated with the expression of generativity: examining identity and generativity in multiple roles. *Journal of Adult Development*.
- Harker, L., & Solomon, M. (1996). Change in goals and values of men and women from early to mature adulthood. *Journal of Adult Development*, 3, 133–143.
- Heilbrun, C. G. (1988). *Writing a woman's life*. New York: Norton.
- Helson, R. (1967). Personality characteristics and developmental history of creative college women. *Genetic Psychology Monographs*, 76, 205–256.
- Helson, R. (1997). The self in middle age. In M. E. Lachman & J. B. James (Eds.), *Multiple paths of midlife development* (pp. 21–43). Chicago, IL: The University of Chicago Press.
- Helson, R. (1992). Women's difficult times and the rewriting of the life story. *Psychology of Women Quarterly*, 16, 331–347.
- Helson, R., Mitchell, V., & Moane, G. (1984). Personality and patterns of adherence and non-adherence to the social clock. *Journal of Personality and Social Psychology*, 46, 1079–1096.
- Helson, R., & Moane, G. (1987). Personality change in women from college to midlife. *Journal of Personality and Social Psychology*, 53, 176–186.
- Helson, R., & Stewart, A. J. (1994). Personality change in adulthood. In T. F. Heatherton & J. L. Weinberger (Eds.), *Can personality change?* (pp. 201–225). Washington, DC: American Psychological Association.
- Helson, R., Stewart, A. J., & Ostrove, J. (1995). Identity in three cohorts of midlife women. *Journal of Personality and Social Psychology*, 69, 544–557.
- Helson, R., & Wink, P. (1992). Personality change in women from the early forties to the early fifties. *Journal of Personality and Social Psychology*, 7, 46–55.
- Howard, A., & Bray, D. (1988). *Managerial lives in transition: Advancing age and changing times*. New York: Guilford.
- Idler, E. L., & Angel, R. J. (1990). Self-rated health and mortality in the NHANES-I epidemiologic follow-up study. *American Journal of Public Health*, 80, 446–452.
- Jacques, E. (1965). Death and the midlife crisis. *International Journal of Psycho-analysis*, 46, 502–514.
- Jenkins, S. R. (1989). Longitudinal prediction of women's careers: Psychological, behavioral, and social-structural effects. *Journal of Vocational Behavior*, 34, 204–235.
- Jenkins, S. R. (1994). Need for power and women's careers over 14 years: Structural power, job satisfaction, and motive change. *Journal of Personality and Social Psychology*, 66, 155–165.
- Jones, C. J., & Meredith, W. (1996). Patterns of personality change across the life span. *Psychology and Aging*, 11, 57–65.
- Jung, C. G. (1954). The development of personality. In W. McGuire (Ed.), *The collected works of C. G. Jung* (Vol. 17). Princeton, NJ: Princeton University Press.
- Kroger, J., & Haslett, S. J. (1991). A comparison of ego identity status transition pathways and change rates across five identity domains. *International Journal of Aging and Human Development*, 34, 303–330.
- Lachman, M. E., Lewkowicz, C., Marcus, A., & Peng, Y. (1994). Images of midlife development among young, middle-aged, and older adults. *Journal of Adult Development*, 1, 201–211.
- Levinson, D. J., Darrow, C. M., Klein, E.B., Levinson, M. H., & McKee, B. (1978). *The seasons of a man's life*. New York: Ballantine Books.
- MacDermid, S. M., Franz, C. E., & De Reus, L. A. (1998). Generativity: At the crossroads of social roles and personality. In D. P. McAdams & E. de St. Aubin (Eds.), *Generativity and adult development: Psychosocial perspectives on caring for and contributing to the next generation*. Washington, DC: American Psychological Association Press.

- Mallory, M. E. (1984). Longitudinal analysis of ego-identity status. Unpublished doctoral dissertation, University of California, Davis, California.
- Marcia, J. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3, 551–558.
- Mathews, S. H. (1979). *The social world of old women: Management of self-identity*. London: Sage.
- McAdams, D. P. (1985). *Power, intimacy, and the life story: Personological inquiries into identity*. Homewood, IL: The Dorsey Press.
- McAdams, D. P., & de St. Aubin, E. (1992). A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography. *Journal of Personality and Social Psychology*, 62, 1003–1015.
- McAdams, D. P., de St. Aubin, E., & Logan, R. L. (1993). Generativity among young, midlife, and older adults. *Psychology and Aging*, 8, 221–230.
- McAdams, D. P., Hart, H. M., & Maruna, S. (1998). The anatomy of generativity. In D. P. McAdams & E. de St. Aubin (Eds.), *Generativity and adult development: Psychosocial perspectives on caring for and contributing to the next generation*. Washington, DC: American Psychological Association Press.
- Montepare, J. M. (1996). Actual and subjective age-related differences in women's attitudes toward their bodies across the lifespan. *Journal of Adult Development*, 3, 171–182.
- Neugarten, B. L. (1968). The awareness of middle age. In B. L. Neugarten (Ed.), *Middle age and aging*. Chicago: University of Chicago Press.
- Ochse, R., & Plug, C. (1986). Cross-cultural investigations of the validity of Erikson's theory of personality development. *Journal of Personality and Social Psychology*, 50, 1240–1252.
- Pals, J. L. (1999). Identity consolidation in early adulthood: Relations with ego-resiliency, the context of marriage, and personality change. *Journal of Personality*, 67, 295–329.
- Peterson, B. E., & Klohnen, E. C. (1995). Realization of generativity in two samples of women at midlife. *Psychology and Aging*, 10, 20–29.
- Peterson, B. E., & Stewart, A. J. (1990). Using personal and fictional documents to assess psychosocial development: A case study of Vera Brittain's generativity. *Psychology and Aging*, 5, 400–411.
- Reinke, B. J., Ellicott, A. M., Harris, R. L., & Hancock, E. (1985). Timing of psychosocial changes in women's lives. *Human Development*, 24, 259–280.
- Robbins, L. C. (1963). Parental recall of child-rearing practices. *Journal of Abnormal and Social Psychology*, 66, 261–270.
- Roberts, B. W., & Helson, R. (1997). Changes in culture, changes in personality: The influence of individualism in a longitudinal study of women. *Journal of Personality & Social Psychology*, 72, 641–651.
- Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (1991). *Measures of personality and social psychological attitudes*. San Diego, CA: Academic Press.
- Ryff, C. D. (1989). In the eye of the beholder: Views of psychological well-being among middle-aged and older adults. *Psychology and Aging*, 4, 195–210.
- Ryff, C. D. (1991). Possible selves in adulthood and old age: A tale of shifting horizons. *Psychology and Aging*, 6, 286–295.
- Ryff, C. D., & Heinicke, S. G. (1983). Subjective organization of personality in adulthood and aging. *Journal of Personality and Social Psychology*, 44, 807–816.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719–727.
- Ryff, C. D., & Migdal, S. (1984). Intimacy and generativity: Self-perceived transitions. *Signs*, 9, 470–481.
- Ryff, C. D., & Singer, B. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics*, 65, 14–23.
- Scarf, M. (1980). *Unfinished business*. New York: Doubleday.
- Schaie, K. W., & Willis, S. L. (1986). *Adult development and aging* (2nd ed.). Boston, MA: Little, Brown.
- Schuster, D. T., Langland, L., & Smith, D. G. (1993). The UCLA gifted women, Class of 1961: Living up to potential. In K. D. Hulbert & D. T. Schuster (Eds.), *Women's lives through time* (pp. 211–231). San Francisco: Jossey-Bass.
- Slotterback, C. (1996). Projections of aging: Impact of generational differences and the aging process on perceptions of adults. *Psychology and Aging*, 11, 552–559.
- Slotterback, C., & Saarnio, D. A. (1996). Attitudes toward older adults reported by young adults: Variation based on attitudinal task and attribute categories. *Psychology and Aging*, 11, 563–571.
- Stewart, A. J., Franz, C., & Layton, L. (1988). The changing self: Using personal documents to study lives. *Journal of Personality*, 56, 41–74.
- Stewart, A. J., & Healy, J. M., Jr. (1989). Linking individual development and social changes. *American Psychologist*, 44, 30–42.
- Stewart, A. J., & Vandewater, E. A. (1998). The course of generativity. In D. P. McAdams & E. de St. Aubin (Eds.), *Generativity and adult development*. Washington, DC: American Psychological Association Press.
- Suls, J., & Mullen, B. (1982). From the cradle to the grave: Comparison and self-evaluation across the life-span. In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 1, pp. 97–125). Hillsdale, NJ: Lawrence Erlbaum Assoc.
- Tangri, S. S. (1969). *Role-innovation in occupational choice among college women*. Unpublished doctoral dissertation, University of Michigan.
- Tangri, S. S. (1972). Determinants of occupational role-innovation among college women. *Journal of Social Issues*, 28, 177–200.
- Tangri, S. S., & Jenkins, S. R. (1986). Stability and change in role innovation and life plans. In K. D. Hulbert & D. T. Schuster (Eds.), *Women's lives through time: Educated American women of the twentieth century* (pp. 259–281). San Francisco: Jossey-Bass.
- Tangri, S., & Jenkins, S. (1993). The University of Michigan Class of 1967: The women's life paths study. In K. D. Hulbert & D. T. Schuster (Eds.), *Women's lives through time* (pp. 259–281). San Francisco: Jossey-Bass.
- Troll, L. E. (1985). *Early and middle adulthood* (2nd ed.). Belmont, CA: Brooks/Cole.
- Unger, R., & Crawford, M. (1996). *Women and gender* (2nd ed.). New York: McGraw-Hill.
- Vaillant, G. E. (1993). *The wisdom of the ego*. Cambridge, MA: Harvard University Press.
- Vandewater, E. A., Ostrove, J. M., & Stewart, A. J. (1997). Predicting women's well-being in midlife: The importance of personality development and social role involvements. *Journal of Personality and Social Psychology*, 72, 1147–1160.
- Waterman, A. S. (1982). Identity development from adolescence to adulthood: An extension of theory and a review of research. *Developmental Psychology*, 18, 341–358.
- Whitbourne, S. K. (1986). *Adult development* (2nd ed.). New York: Praeger.
- Whitbourne, S. K., & Tesch, S. A. (1985). A comparison of identity and intimacy statuses in college students and alumni. *Developmental Psychology*, 15, 1039–1044.
- Whitbourne, S. K., & VanManen, K.-J. W. (1996). Age differences in and correlates of identity status from college through middle adulthood. *Journal of Adult Development*, 3, 59–70.
- Whitbourne, S. K., Zuschlag, M. K., Elliot, L. B., & Waterman, A. S. (1992). Psychosocial development in adulthood: A 22-

- year sequential study. *Journal of Personality and Social Psychology*, 63, 260–271.
- Williams, J. H. (1987). *Psychology of women: Behavior in a biosocial context*. NY: Norton.
- Wink, P. (1992). Three narcissism scales for the California Q-set. *Journal of Personality Assessment*, 58, 51–66.
- Wink, P., & Helson, R. (1993). Personality change in women and their partners. *Journal of Personality and Social Psychology*, 65, 597–605.
- Woodruff, D. S., & Birren, J. E. (1972). Age changes and cohort differences in personality. *Developmental Psychology*, 6, 252–259.