

Between Adolescents and Aging Grandparents: Midlife Concerns of Adults in the "Sandwich Generation"

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This study examined whether the midlife transition of men and women in the "sandwich generation" was related to their 15- to 19-year-old adolescent's psychosocial development and their relationships with their own aging parents (i.e., the grandparents). One hundred eighty-six (186) respondents representing adolescents, mothers, and fathers from 62 families completed questionnaires that assessed adolescents' psychological autonomy and involvement in adult-type roles, adults' midlife transition and marital quality, and adults' relationships with their aging parents. Analyses conducted by domain revealed that women reported greater concerns with midlife issues when their adolescents demonstrated fewer signs of psychological autonomy and involvement in adult-type roles whereas men reported more intense midlife concerns when they experienced more strain in their relations with their own parents. When adolescent, grandparent, and marital factors were considered conjointly, the results indicated that women's level of midlife concerns was still related to their adolescents' development, but men's level of concerns was most strongly related to their satisfaction with the quality of their marriages. The discussion focuses on adult women's and men's experience of the midlife transition in relation to adolescents' development, parents' relationships with aging grandparents, and marital quality.

KEY WORDS: Midlife; adult development; family relationships; adolescent development; marital quality.

INTRODUCTION

Previous research has suggested that developmental changes among family members are interdependent; one family member's changes may challenge others to assess and reflect on their own development. For example, in the area of adult midlife development, research has established a link between adolescents' pubertal development and their parents' midlife transition (e.g., Silverberg & Steinberg, 1990; Small, Eastman, & Cornelius, 1988), and between middle-aged adults' observations of the aging of grandparents and their own aging concerns

(e.g. Golden, 1982; Lieberman, 1978; Rossi, 1980). These studies, which focused on two generations, pointed to interdependence between generations but did not fully capture the complexities of midlife development.

Many of today's families are multigenerational (Hagestad, 1986; Shanas, 1980). Indeed, the modal family configuration for adults aged 50-54 is the three-generation family, i.e., adults who have one or more living parents (or in-laws) and one or more children (Soldo, 1996). Thus, many middle-aged adults find themselves a part of the "sandwich generation," that is, middle-aged adults who are caught between the often competing needs of children and aging parents (Lang & Brody, 1983). As America ages, increasing numbers of individuals will be called upon to provide care to the burgeoning number of elderly persons and assistance to younger generations as they are negotiating their own developmental changes (Brody, 1990). Women are often the ones who take on family

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caregiving tasks. Recent research indicates that women who have stress in their roles as wife, mother, and caregiver of an aging parent experience more role overload, poorer physical health, and more negative and less positive affect than women who have stress in only one family role (Stephens, Franks, & Townsend, 1994). Although the psychological well-being of "women in the middle" has begun to receive some empirical attention, assessments have not yet been conducted of the "midlife crises" or transitional experiences⁴ of women and men who are in a multigenerational caregiving context. As their children mature and their parents age, these adults in the middle may become acutely aware of issues regarding their own aging (Neugarten, 1979).

Drawing from lifespan development and family systems theories, the present study was designed to investigate the midlife transition of adults who are rearing adolescents and who are caring for aging parents. The lifespan perspective on development posits that change is constant in all family members from conception to death (Baltes, Reese, & Lipsitt, 1980). Development during middle age appears to consist of a qualitative shift in thinking (Neugarten, 1979). In particular, this period is characterized by heightened concerns regarding the body, mortality, and evaluation of choices made in the domains of values, career, and mate selection (Cytrynbaum et al., 1980; Neugarten, 1979). Adults in the sandwich generation experience this development in a complex family environment replete with caretaking needs. Family systems theorists contend that families are continually trying to balance the tension that arises from normal, developmental changes among their members (Broderick & Smith, 1979). It is likely that the tension among family members predicted by family systems theory would be heightened at times when family members are facing major changes, e.g., when adolescents are negotiating transitional issues, grandparents are facing changes due to advancing age, and middle-aged adults are trying to meet the needs of both families of procreation and families of origin. Consequently, it is important that investigations of the psychological well-being of middle-aged parents address a context that considers adolescent development, parents' relationships with aging grandparents, and the parents' own relationships with one another.

Adolescent Development and Parental Midlife Experiences

Investigations of the physical, cognitive, and social changes characteristic of adolescence in relation to parents' experience of the midlife transition typically have focused on early adolescence and underscore the effects of children's pubertal maturation on parents' midlife development (e.g., Baruch, Barnett, & Rivers, 1983; Rossi, 1980; Silverberg & Steinberg, 1990). The hypothesis is that the marked biological changes that distinguish the period of early adolescence are likely to affect parents' sense of personal well-being. For example, Silverberg & Steinberg (1990) found that signs of girls' physical maturity were related to mothers' reports of more intense midlife identity concerns. Reverberations from adolescents' pubertal maturation are also believed to extend to changes in family relations in general, as indicated by findings that link pubertal development to greater conflict among adolescents and their parents (e.g., Hauser et al., 1985; Hill, Holmbeck, Marlow, Green, & Lynch, 1985a, 1985b; Steinberg, 1981). Whereas these studies indicated that pubertal maturation is a meaningful factor for families of adolescents, there are some limitations to this tendency to examine adults' midlife in relation to adolescence only during puberty.

First, puberty is not a single event but a gradual process; pubertal development has been underway for quite some time before the manifestations of that development become evident (Tanner, 1975). It is difficult to determine the point in this process in which the changes become most salient and, therefore, most likely to initiate responses from family members. Consequently, critics have argued that attempts to classify this process into discrete pubertal stages must be interpreted with caution (Brooks-Gunn & Warren, 1985). Second, there likely are other, more notable aspects of adolescent development that are associated with parents' midlife concerns which have been overlooked because of the emphasis on puberty. In particular, the social and cognitive changes that mark the progression through adolescence may be important factors in parents' midlife development. For example, Petersen found that grade-in-school exerted a greater influence over adolescent behavior than did pubertal maturation (Petersen, 1985; Petersen & Crockett, 1985). This observation suggests that it may be the *status* changes that are afforded by our age-graded society that result in adolescents' behavior changes and,

⁴Although "midlife crisis" is the colloquial term, it does have negative connotations. Not all adults experience midlife concerns at a crisis level. Therefore we use the more neutral terms of midlife transitions and midlife concerns.

ultimately, precipitate parents' midlife concerns. This line of reasoning is supported by the finding that, in American culture, it is age, rather than pubertal development, that has played a prominent role in the redefinition of adolescent status (Committee on Adolescence, 1968; Petersen & Crockett, 1985). This redefinition begins around the ages of 15 or 16, when the adolescent is permitted to leave school, to work, and to drive (Steinberg, 1989), that is, to take on some of the privileges and responsibilities of adulthood. At this time, the adult society is challenged to respond differently toward the adolescent. Perhaps the transition in adolescent social status as children start to assume the roles and responsibilities of adulthood serves as a catalyst for parents' ruminations regarding their own lives.

In order to consider the impact that changes adolescents' roles have on family members and family relationships, researchers should turn to the middle years of adolescence, a time when young people take the first steps toward adult roles and gain a new status that is recognized by the adult community. Parents see the maturational changes evident in first dates, driver's licenses, and adolescent employment as a vivid signal that their babies are growing up; thus, adolescents taking on adult roles makes salient the passage of time for parents. Moreover, the psychosocial and behavioral maturation of adolescents may coincide with parents' taking stock at midlife. For example, adolescents who have landed their first jobs or have entered a steady dating relationship may remind parents of the choices they have made in the domains of career and mate selection. Thus, young people who exhibit fresh involvement in adult roles may serve as objects of comparison in the parents' own midlife reflections, thereby provoking parents' evaluations regarding the choices that they have made in their own lives.

In addition to undergoing social role changes, adolescents are also demonstrating advances in their sense of psychosocial autonomy. Empirical evidence indicates that adolescents become increasingly more self-reliant, adopt a more positive attitude toward work, and come to a more firmly established sense of identity over the course of adolescence (Greenberger, 1984; Greenberger & Sorensen, 1974). This growth in autonomy may play a role in parents' midlife perceptions; parents may feel greater concern over their own development when their children do not show signs of becoming autonomous individuals, perhaps indicating that they have failed in this aspect of parenting. Alternatively, parents may feel self-satisfied and confi-

dent about themselves when they observe that their adolescents are well on their way to becoming successful young adults. Previous research supports a positive relationship between adolescents' psychosocial maturity and parental midlife experiences (Hamill, 1987); however researchers have not yet considered this association in the context of a multigenerational family.

Grandparent Factors in Relation to Adults' Midlife Experiences

In contrast to research that considers the interdependence of adolescent and parental development, few investigations have examined the concurrent developmental changes in middle-aged parents and grandparents. With the "graying of America" (Schulz & Ewen, 1993) it is relevant to expand the focus beyond parents and adolescents to include the study of older family members and relationships that might influence middle-aged parents' midlife experiences. For example, from the perspective of family systems theory (Broderick & Smith, 1979), one might argue that the stress that middle-aged parents endure in their relationships with aging grandparents renders their own aging processes more salient. Parents may find it difficult to watch grandparents struggle with aging issues. Although there certainly are rewards in caregiving, parents may feel taxed in their attempts to meet responsibilities and expectations regarding the care of aging family members, particularly if these grandparents are in poor physical or psychological condition. Middle-aged women who were primary caregivers of an impaired parent or parent-in-law felt stressed by the aging parent being critical, unresponsive, uncooperative and demanding (Stephens et al., 1994).

Whereas many researchers have posited a link between the aging family members and middle-aged adults' own views on aging (e.g., Golden, 1982; Lieberman, 1978; Petersen, 1979), few empirical investigations of this association actually have been undertaken. Moreover, no studies have examined the effects that caring for grandparents while there are adolescents in the home has on adults' experience of the midlife transition. In fact, most studies have treated these families as if they are conceptually distinct, choosing to focus on either the family of procreation (e.g., in studies of parent-adolescent relations) or on the family of origin (e.g., in studies on caregiving). Thus, most studies have failed to consider that many middle-aged adults face concurrent developmental issues of multiple family members from various generations.

Marital Relations and Parents' Experience of Midlife Transition

Before turning to the present study, consideration is given to the role that middle-aged adults' marital satisfaction plays in their experience of midlife crisis. Marital functioning is one domain that is often cited as undergoing reevaluation during midlife (Cytrynbaum et al., 1980; Levinson, 1977). Given that individuals with harmonious marriages enjoy greater psychological well-being (Gove, 1972; Gove & Tudor, 1973), one would expect that individuals who are involved in satisfying marital relationships would experience fewer concerns over midlife issues. Associations between midlife transition and marital satisfaction have been found (e.g., Hamill, 1987, 1990; Steinberg & Silverberg, 1987), but it is not clear whether the association always holds for both women and men. For example, Hamill (1987) found that husbands', but not wives', more intense experience of midlife issues was related to lower levels of marital satisfaction. Silverberg and Steinberg (1987), using a sample of families with younger adolescents, found that both wives' and husbands' concerns over midlife issues were negatively related to their own reports of marital satisfaction. The divergence of findings suggests that additional investigations are warranted.

The Present Study

The goal of the present study was to examine the multigenerational context of adults' assessments of their lives during midlife. The goal was operationalized in two ways. First, adults' experience of the midlife transition was examined by considering midlife concerns in relations to aspects of adolescent development, characteristics of grandparents, and parents' satisfaction with their marriages. It was hypothesized that lower levels of psychosocial autonomy would be related to women's and men's heightened concerns with midlife issues. Adolescents' extent of participation in adult roles also was expected to be associated with parents' midlife concerns, but the direction of effects was exploratory. If parents see adolescents' adult role-taking as emblematic of adolescents' mastery and parental success in child rearing, then fewer midlife concerns would be expected. On the other hand, if parents envision adolescents' involvement in adult roles as a reminder of their own choices and possible shortcomings, adolescents' adult role taking would be associated with adults' heightened midlife concerns. Grandparents' poor health, parents' greater sense of

burden in their relationships with aging grandparents, and parents' lower satisfaction with their own marital relationships were also expected to be associated with greater midlife concerns. Second, these relationships were examined in a multivariate context. Specifically, this study considered the joint contributions of adolescent development, relationships with aging (grand) parents, and parents' marital quality to variations in adults' levels of midlife concerns.

METHOD

Sample

A total of 184 respondents representing mothers, fathers, and adolescents from 62 three-generation families completed questionnaires in their homes. Fathers from two of the families declined to participate; however, data were provided by mothers and adolescents. Families who participated in the study had to meet the following criteria: (1) The family had to be intact, from first marriages (i.e., no single-parent or step-parent families), (2) the family had to have at least one child in middle adolescence (i.e., 15-19 years old), and (3) the family had to have at least one living grandparent (i.e., the adolescent's grandparent). Families were recruited through a variety of sources, including a public forum and newspaper announcements. Eighty-three percent of the 88 families who initially expressed interest in the research met the study criteria; 85% of these 75 eligible families completed questionnaires ($N = 62$).

Of the 62 adolescents, there were 34 males and 28 females ($M = 16.9$ years old; $SD = 1.2$, range = 14.8 to 19.0 years) in the study. All adolescents were high school students. The average ages of the 62 mothers and fathers were 44.5 ($SD = 4.3$) and 46.4 ($SD = 5.0$) years old, respectively. Most parents had attained at least an A.A. degree (62.9% of mothers and 77.6% of fathers), reported a family income of \$55,000 per year or more (more than 80% of the sample), and were currently employed (60% of mothers and 96.6% of fathers). Because measures assumed paternal employment, two fathers found to be unemployed were eliminated from analyses. The families were predominantly white (86.7%) and Protestant was the modal religion (43.3%). Couples had been married an average of 22 years ($SD = 3.79$) and had an average of three children.

Table I. Intercorrelations Among Major Study Variables^a

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
|------------------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| (1) Adolescent age | - | -.20 ^d | - | -.18 ^d | .68 ^g | -.19 ^d | .18 ^d | -.17 ^d | -.22 ^e | .08 | -.08 |
| (2) Income | -.13 | - | - | .40 ^g | -.11 | .11 | .07 | -.11 | -.01 | .17 | -.09 |
| (3) Work Status ^b | .08 | .08 | - | - | - | - | - | - | - | - | - |
| (4) Psychosocial autonomy | -.17 ^d | .43 ^g | -.12 | - | -.07 | .19 ^d | -.01 | -.01 | .21 ^d | .19 ^d | -.02 |
| (5) Adult roles | .70 ^g | .02 | .18 ^d | -.04 | - | -.04 | .01 | -.07 | -.09 | .17 ^d | -.15 |
| (6) Gender ^c | -.19 ^d | .06 | -.03 | .18 ^d | -.03 | - | .07 | .02 | .05 | .11 | -.10 |
| (7) Birth order ^c | .19 ^d | .03 | .03 | -.01 | .03 | .04 | - | .07 | .00 | .21 ^d | -.15 |
| (8) Grandparent health | -.04 | .17 ^d | -.16 | .04 | .03 | .04 | .06 | - | -.27 ^e | -.04 | .21 ^d |
| (9) Caregiving strain | .02 | -.10 | .15 | -.07 | -.06 | .01 | .07 | -.42 ^g | - | -.18 ^d | .21 ^d |
| (10) Marital adjustment | -.12 | .20 ^d | -.16 | .33 ^f | -.04 | .10 | -.04 | .38 ^g | -.22 ^e | - | -.49 ^g |
| (11) Midlife transition | -.09 | -.40 ^g | .24 ^e | -.40 ^g | -.21 ^e | .00 | .06 | -.16 | .20 ^d | -.31 ^g | - |

^aMiddle-aged men's correlations are above the diagonal (*n* = 58); middle-aged women's correlations are below the diagonal (*n* = 62).

^bWork status = employed (0); nonemployed (1).

^cGender = male (1); female (2); birth order = 1st born (1); later born (2).

^d*p* ≤ .10.

^e*p* ≤ .05.

^f*p* ≤ .01.

^g*p* ≤ .001.

Procedure

Questionnaires were delivered to participants' homes by the researchers. Three separate questionnaire packets were provided for the adolescent, the mother, and the father. The researchers stayed at each home long enough to provide instructions and to request that each family member complete his/her questionnaire independently. The questionnaires were picked up at the home 1 hour later.

Measures

Adolescents. Assessments of adolescent development included involvement in dating, driving, and employment roles (i.e., adolescents' assumption of adult roles), a measure of psychosocial maturity, and two adolescent status variables. *Adult role involvement* was calculated by obtaining information regarding the highest level of functioning in the areas of dating, driving, and employment from adolescents. Dating was rated using five response categories developed by Silverberg and Steinberg (1990). Dating was rated from a low score of 0 for not going out at all or going out in a group to a high score of 4 for having a steady partner. The domain of driving was assessed using four response categories, from a low score of 0 for not having a permit or license, to a high score of 4 for having a license and one's own car. The domain of employment was rated using three response categories, from a low score of 0 for not having a job, to a high score of 2 for having a job that is not one's first job. Once the highest level of functioning was found for each domain, the do-

main scores were weighted so that each contributed one-third to the total score. These weighted role scores were summed to form an index that reflects the adolescents' involvement in adult roles. The theoretical range for the adult role score is 0 to 9.94; for this sample, the mean adolescent role score was 5.53 (*SD* = 2.89, range = 0 to 9.94). Higher scores indicated greater participation in adult roles.

Given that our society affords adult roles upon reaching certain "milestone" ages, the relationship between adolescents' adult role scores and chronological age is of interest. In this sample, roles and age were highly correlated (*r* = .70, *p* .001), indicating that, as adolescents grow older, they are more involved in adult roles like dating and driving. Some readers might ask if adolescents' role status and psychosocial maturity are highly correlated with age, why not simply study age? First, analyses revealed that these measures are not redundant, as apparent from the different associations they exhibited with major study variables (see Table I). Furthermore, several researchers have argued that chronological age is not really useful in developmental research because it cannot be varied and it has no inherent psychological meaning; rather, it is argued that the goal of developmental psychology is to identify the parameters responsible for behavioral changes which are correlated with chronological age and use them in explanations of behavior (Baltes & Goulet, 1971).

Adolescents' sense of *psychosocial autonomy* was assessed using the Individual Adequacy subscale of Greenberger and Sorensen's (1974) Psychosocial Maturity Inventory (PSMI; 11th grade version, Form D).

The rationale behind the scale is that all societies expect adults to be able to function on their own and therefore require young people to become more self-sufficient during their period of major growth (Greenberger, 1984). Adolescent autonomy is promoted through three developmental achievements: self-reliance, a positive orientation toward work, and a clear sense of identity. On the PSMI, subjects rated items designed to tap these dimensions using a 4-point Likert scale (1 = *agree strongly*, 4 = *disagree strongly*). The three subscales were summed to yield an autonomy score; higher scores indicate more mature responses. The mean score was 9.4 ($SD = 1.25$, range = 6.7 to 11.7). The PSMI has been shown to have good reliability and validity (see Greenberger, Josselson, Knerr, & Knerr, 1975). In this sample, the scale demonstrated an internal consistency of .88, as determined by Cronbach's alpha.

Middle-Aged Adults. Adult women and men completed midlife transition and marital quality instruments. Additionally, they were asked to indicate the (adolescent's) grandparent to whom they had provided the most help in the past 6 months; they reported the grandparent's health status and provided information on the level of strain they experienced in this relationship.

The 33-item Midlife Transition Scale (MTS; Hamill, 1987, 1990) was used to assess the extent to which middle-aged parents negatively evaluated their lives in a variety of domains. Domains included feelings about bodily changes, satisfaction and advancement issues regarding one's career, feelings about the passing of time, and confidence in and satisfaction with one's values. Scale items were gleaned from a variety of sources on midlife transition (e.g., Cytrynbaum et al., 1980; Farrell & Rosenberg, 1981; Gould, 1972; Levinson 1977); some items were taken from existing instruments and other items were devised by the first author. Sample items include: "My health has begun to decline"; "I wish that I could change careers"; and "I feel like time is rushing by." Each item on the scale was rated using a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). Scores were converted to mean item scores for ease of interpretation (range = 1 to 5). The scale was constructed such that higher scores indicate greater concern over midlife issues. The mean midlife transition scores for mothers and fathers were 2.20 ($SD = .47$) and 2.11 ($SD = .54$), respectively.

The scale has demonstrated good reliability and validity. Internal consistency of the scale in the present

sample was .86 for mothers and .89 for fathers, as determined by Cronbach's alpha. The criterion validity of the scale is supported by its positive association with Silverberg's (1986) measure of midlife transition ($r = .72$ for mothers and .74 for fathers). (Despite the high correlation between the two scales, the reader might be interested in an important conceptual distinction between them. The MTS conceptualizes the midlife transition as the individual's reexamination of aspects of the self, i.e., values, body image, time orientation, and career achievements. Silverberg's midlife transition measure includes marital evaluation in the scale. Although part of the midlife evaluation includes marriage, we regard this as a relational issue, not an aspect of self, which merits separate attention and assessment.) Construct validity was demonstrated between the MTS and standard measures of well-being: The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977), the Spielberger Trait Anxiety Scale (Spielberger, Gorsuch, & Lushene, 1970), and the Rosenberg (1965) Self-Esteem Scale. Adults who obtained high MTS scores reported high levels of anxiety (r for mothers = .60, fathers = .68) and depression (r for mothers = .36, fathers = .57), and low levels of self-esteem (r for mothers = -.47, fathers = -.65). Despite some of the moderately high correlations between these measures, additional analyses conducted to assess the validity of the MTS argue for viewing midlife transition issues and mental health indicators as separate constructs.⁵

Although both mothers and fathers completed the MTS, two different career subscales were used with employed and nonemployed mothers. The seven items which comprise the subscale were altered in

⁵Multivariate analyses were conducted to determine whether midlife transition is empirically distinct from anxiety, depression, or self-esteem. In these analyses, the three mental health indices were regressed on the study variables in separate models for fathers and mothers. The results indicated that the midlife transition scale demonstrated different relationships with study variables than did the mental health indices. For example, for fathers, the strongest predictor of self-esteem, depression, and anxiety was burden in the caregiving relationship whereas the marital relationship was the best predictor of midlife transition. Additionally, the grandparent health measure did not make significant independent contributions to the mental health indices even though it was significant in the analysis of fathers' midlife transition. Evidence that the midlife transition scale operates differently than the mental health indices was also provided in analyses with mothers' scores. For example, mothers' sense of self esteem was related to their level of income, adolescent gender, adolescent roles, and their marital satisfaction; conversely, midlife transition was associated with their level of income, work status, and adolescents' roles.

the non-employed version so as to provide meaningful items for the employed and nonemployed women to evaluate. In the employed version, the MTS assessed career satisfaction and advancement issues, whereas analogous items on the non-employed version reflected satisfaction with the homemaker role and perceived costs associated with not having pursued a career. To control for any effects that might be due to the use of slightly different scales, mothers' work status (employed vs. nonemployed) was entered as a control variable on the first step of regression analyses that considered mothers' MTS score.⁶

Spanier's (1976) Dyadic Adjustment Scale (DAS) was used to assess parents' marital quality. Responses were coded and scored to yield individual marital adjustment scores for mothers and fathers. The scale has a theoretical range of 0 to 151; higher scores indicate greater marital adjustment. The average DAS score for women in this sample was 117.3 ($SD = 12.17$); for men it was 115.5 ($SD = 15.06$). The scale has demonstrated good reliability and validity (Spanier, 1976); in the present study, the alpha was .96.

Grandparents. Each parent was also asked to indicate the grandparent to whom they had provided the most help in the past 6 months. "Help" could range from providing advice to assisting with activities of daily living such as eating and bathing. Parents were free to determine what "help" meant for their own caregiving relationship. A majority of middle-aged women (58.1%) and men (51.7%) chose their own mothers as the person they helped most. Mothers-in-law were the next most likely parent to be chosen by both middle-aged women and men (29% and 20.7%, respectively). Fifty-one percent of women and 39.7% of men reported helping the target grandparent by providing assistance with two or more tasks (e.g., running errands, household repairs) during the past month⁷

⁶Given that mothers' work status was not a primary variable of interest in the proposed model, the sample of mothers was analyzed as a whole. Reliability analyses indicated that the use of the slightly different scales did not change the internal consistency of the MTS appreciably (Cronbach's alpha = .86 and .84 for employed and nonemployed women, respectively). Furthermore, validity analyses indicated that the career items did not change the way the scale operated; correlations between the well-being measures and MTS scale without the career items were essentially the same as those correlations with the total MTS (Hamill, 1990).

⁷Mothers were found to provide significantly more help to grandparents than did fathers ($M_s = 10.37$ and 3.09 , respectively; $z = 2.57$, $p \leq .01$).

Parents then rated the health of the grandparent and the degree of psychological strain they experienced in their relationships with the grandparents. A one-item rating of the *grandparent's health* was obtained from middle-aged adults. They were asked to rate the grandparent's health relative to other people the grandparent's age, on a 4-point Likert scale (1 = *poor health*, 4 = *excellent health*). Mothers reported an average grandparent health status of 2.88 ($SD = .86$); fathers reported a mean grandparent health status of 3.07 ($SD = .94$).

Finally, parents indicated the degree of *psychological strain* they experienced in their helping relationships with grandparents. Strain was assessed using an adaptation of the Zarit Burden Interview (Zarit & Zarit, 1987). Although the original interview was intended for use with caregivers of dementia patients, the inventory was altered in the present study so as to be applicable to less intense caregiving relationships. For example, items that were specific to those caregivers providing in-home care were rewritten such that *care* was replaced with *help*. This measure reflects some of the common worries and feelings that middle-aged parents have about aging grandparents. Sample items include, "I feel that my parent asks for more help than he/she needs," and "I worry about how my parent's care will influence future demands on my time." Items were rated using a 5-point Likert scale (0 = *never feel burdened*, 4 = *nearly always feel burdened*). Mean item scores were used in analyses; mothers' mean level of strain was .94 ($SD = .62$) and fathers' mean level of strain was .67 ($SD = .46$). Higher scores indicate greater strain. The original instrument demonstrated good reliability and validity (Zarit & Zarit, 1987), as did the adapted instrument. In this sample, reliability as measured by Cronbach's alpha was .93 for mothers and fathers. Construct validity was demonstrated by the significant associations of the adapted measure with anxiety ($r_s = .24$ for mothers and $.46$ for fathers, $p \leq .05$) and the amount of help provided to the grandparent per month ($r_s = .35$ for mothers and $.38$ for fathers, $p \leq .05$).

Analysis Plan

Relations between study variables were first examined through bivariate correlations. In the main set of analyses, midlife transition was regressed on variables from the adolescent and grandparent do-

mains in separate adolescent and grandparent models. In an effort to determine how these factors work together, a final model considered variables from the three domains (adolescent, grandparent, marital) in a multivariate context. Because women's midlife transition scores were inversely related to family income (see Table I), for analyses with women, family income was entered on the first step as a control variable, as was work status, given that the women varied on this dimension.

RESULTS

Bivariate Correlational Analyses

Examination of bivariate correlations (see Table I) revealed somewhat different patterns for middle-aged women and men. Women's midlife transition experiences were more intense when their adolescents displayed less psychosocial autonomy and engaged in fewer adult roles, and when their marital relations were less satisfying. In addition, there was a trend for women's midlife scores to increase with greater strain in caring for the target grandparent. Men's midlife experience were more intense when their marriages were less satisfying. At a trend level, men's midlife scores increased when the target grandparent was in better health and when the men reported strain in caring for the target grandparent. Thus, the bivariate correlations indicated that middle-aged women's experience of midlife concerns were related to adolescent factors and marital functioning whereas middle-aged men's midlife experiences were linked more exclusively to marital functioning.

Domain Analyses

Multiple regression analyses were conducted to assess the relative contributions of variables from the domains of adolescent development and the parent-grandparent relationship to middle-aged adults' experience of midlife transition. In the analyses that considered adolescent variables, women reported significantly greater concerns over midlife issues when their adolescents had assumed fewer adult roles ($\beta = -.26, p \leq .05$). Support was found for the expected association between adolescents' greater psychosocial autonomy and women's less intense midlife concerns ($\beta = -.24, p \leq .053$). This model explained a significant 34% of the variance in women's level of

midlife concerns (MTS scores) ($F[4,56] = 4.82, p \leq .001$). There were no significant associations between adolescent variables and middle-aged men's experience of midlife transition (see Table II).

Middle-aged men's level of midlife concerns were related to dealing with grandparents. The within-domain analyses of grandparent factors revealed that men's greater sense of psychological strain in their relationships with grandparents was associated with increased concerns regarding midlife issues ($\beta = .28, p \leq .05$). Unexpectedly, men also reported higher transition concerns when grandparents were in better health ($\beta = .29, p \leq .05$). The explained variance for the overall model was 12% ($F[2,55] = 3.69, p \leq .05$). There were no significant associations between grandparent factors and mothers' reports of midlife transition (refer to Table II).

Full-Model Analyses

A final set of analyses was conducted in which the significant predictors from the within-domain analyses were entered in models that also considered marital quality. These analyses revealed a difference in the importance of marital quality to midlife concerns for women and men. For men, marital quality made a significant, independent contribution to the explained variance. As hypothesized, men reported more concerns with midlife issues when they were less satisfied with the quality of their marriages ($\beta = -.45, p \leq .001$) (see Table III). Note that the addition of marital adjustment to the model reduced the contribution of psychological strain to a non-significant level. The full model explained a significant 32% of the variance in men's level of midlife concerns (MTS scores) ($F[5,52] = 4.81, p \leq .01$).

A different picture emerged for middle-aged women: The quality of the marital relationship did not play a significant role in women's experience of the midlife transition nor did marital quality add appreciably to the explanation of variation in women's midlife transition. Rather, adolescent adult role behavior (and control variables) continued to be the only variables significantly related to women's midlife experiences (see Table III).

DISCUSSION

Analyses of the midlife concerns of middle-aged adults from "sandwich generation families" illustrate

Table II. Within-domain Regressions: Women's and Men's Midlife Transition Regressed on Adolescent and Grandparent Factors

| | Mothers' MTS ^a | | | Fathers' MTS ^a | | |
|----------------------------------|---------------------------------------------------------------------|-----------|-------------------|---------------------------------------------------------------------|-----------|------------------|
| | <i>b</i> | <i>se</i> | Beta | <i>b</i> | <i>se</i> | Beta |
| Adolescent domain | | | | | | |
| Control variables ^{b,c} | | | | | | |
| Income | -.10 | .04 | -.30 ^e | - | - | - |
| Work status | .25 | .11 | .25 ^e | - | - | - |
| | <i>R</i> ² change = .23 ^g | | | | | |
| Adolescent variables | | | | | | |
| Psychosocial autonomy | -.09 | .05 | -.24 ^d | -.01 | .06 | -.03 |
| Adult roles | -.04 | .02 | -.26 ^e | -.03 | .03 | -.15 |
| | <i>R</i> ² change = .11 ^e | | | <i>R</i> ² change = .02 | | |
| Overall model | <i>R</i> ² = .34 <i>F</i> (4, 56) = 7.20 ^g | | | <i>R</i> ² = .02 <i>F</i> (2, 55) = .66, n.s. | | |
| Grandparent domain | | | | | | |
| Control variables | | | | | | |
| Income | -.13 | .04 | -.41 ^g | - | - | - |
| Work status | .24 | .12 | .25 ^e | - | - | - |
| | <i>R</i> ² change = .23 ^g | | | | | |
| Grandparent variables | | | | | | |
| Grandparent health | -.00 | .37 | -.00 | .18 | .08 | .29 ^e |
| Caregiving strain | .08 | .10 | .11 | .33 | .15 | .28 ^e |
| | <i>R</i> ² change = .01 | | | <i>R</i> ² = .12 ^e | | |
| Overall model | <i>R</i> ² = .24 <i>F</i> (4, 56) = 4.53 ^f | | | <i>R</i> ² = .12 <i>F</i> (2, 55) = 3.69 ^e | | |

^aMTS = Midlife Transition Scale.

^bWomen's midlife transition scores were inversely related to family income, therefore family income was entered on the first step as a control variable.

^cWomen's work status (employed vs. not employed) was entered on the first step to control for any effects that might be due to the use of slightly different scales.

^d*p* ≤ .10.

^e*p* ≤ .05.

^f*p* ≤ .01.

^g*p* ≤ .001.

that women's and men's experiences are qualitatively different. Women's assessments of their lives at midlife are associated with developmental characteristics of their adolescent children but not their relationships with their own parents. On the other hand men's experiences of the midlife transition are linked to their relationships with their aging parents but not to the characteristics of their adolescent children. At the bivariate level, marital satisfaction operates similarly and predictably for women and men in that those adults who report less satisfaction with their marriages experience more concerns over midlife issues. However, in a multivariate context that includes multigenerational relationships, marital satisfaction is no longer significantly related to middle-aged women's midlife concerns but remains significant for men's.

First, these results indicate that adolescents' development and women's experience of the midlife transition are interrelated. Women have fewer concerns over their own aging when their adolescents demonstrate greater assumption of adult roles, and to some extent, greater psychosocial autonomy. Rather than reminding them of their aging or causing them to reflect negatively on choices they have made, adolescents' increasing independence may signal to mothers that they have done a good job of fostering mastery, establishing solid values, and preparing their children for the adult world. The fact that adolescent variables were not similarly associated with men's experience of the midlife transition may reflect the more limited involvement that fathers typically have during the childrearing years (Montemayor, 1983; Montemayor & Hanson, 1985). The closer links between mothers', as opposed to fathers',

Table III. Summary of Full-Model Regression Analyses of Women's and Men's Midlife Transition Scores

| | <i>b</i> | <i>se</i> | Beta |
|---------------------------|---------------------------------------------------------------------|-----------|-------------------|
| Mothers' MTS ^a | | | |
| Control variables | | | |
| Income | -.10 | .04 | -.30 ^c |
| Work status | .26 | .11 | .26 ^c |
| | <i>R</i> ² change = .23 ^c | | |
| Domain variables | | | |
| Psychosocial autonomy | -.08 | .05 | -.20 |
| Adult roles | -.04 | .02 | -.26 ^c |
| Grandparent health | .02 | .07 | .03 |
| Caregiving strain | .06 | .09 | .08 |
| Marital adjustment | -.00 | .00 | -.13 |
| | <i>R</i> ² change = .13 ^b | | |
| Overall model | <i>R</i> ² = .36 <i>F</i> (7, 53) = 4.27 ^e | | |
| Fathers' MTS ^a | | | |
| Domain variables | | | |
| Psychosocial | -.01 | .05 | -.03 |
| Adult roles | -.00 | .02 | -.04 |
| Grandparent health | .15 | .08 | .24 ^b |
| Caregiving strain | .21 | .15 | .18 |
| Marital adjustment | -.02 | .00 | -.45 ^e |
| | <i>R</i> ² change = .32 ^b | | |
| Overall model | <i>R</i> ² = .32 <i>F</i> (5, 52) = 4.81 ^e | | |

^aMTS = Midlife Transition Scale.

^b*p* ≤ .10.

^c*p* ≤ .05.

^d*p* ≤ .01.

^e*p* ≤ .001.

experience of strain and relations with adolescents is confirming of Hamill's (1994) findings in her study of parent-adolescent communication and of Schmutte and Ryff's (1994) finding that adult children's level of educational and occupational attainment predicted mothers' well-being but not fathers'. The findings linking parental well-being with offspring's adjustment also are consistent with those of Ryff, Lee, Essex, and Schmutte (1994), who reported that parents' well-being is positively associated with their views that their adult children are socially and personally well adjusted.

When grandparent factors were considered alone, middle-aged men's, but not women's, experience of the midlife transition was linked to their perceptions of strain in caregiving and grandparents' health status. This finding was somewhat surprising given that in this sample, as in other studies, women provided a greater amount of care to aging family members than did men (Brody, 1978; Horowitz, 1985). However, when middle-aged men reported

that they were experiencing strain in caring for an aging parent, their midlife experience was intensified. Perhaps when men assume a caregiving role—even a relatively minor one—the experience is more salient and more difficult because it is not socially scripted. The added pressure and responsibility of caring for their aging parents may render men more cognizant of their own mortality and more evaluative of their lives and accomplishments. As the population ages and women, the traditional caregivers, remain active in the labor force, one might expect to see more men take on caregiving responsibilities. This suggests that it would be worthwhile to continue to study the link between caregiving strain and midlife transition particularly in situations where aging family members are physically and/or mentally incapacitated and the caregiving responsibilities are extreme. Although we argue that these changes in the grandparents served as catalysts to fathers' midlife transition, the correlational analyses and multivariate analyses employed

in this study made the direction of effects impossible to determine. It could be that middle-aged males who experience more difficulty in the midlife transition themselves produce more marital strain, more difficulties in grandparenting relationships, and difficulties in maturity strivings among their adolescents. Future studies should address the bidirectionality effects within the family system.

In this study, men indicated that they felt more strained in their relationships with grandparents when grandparents were in poorer health, and both of these variables were positively related to men's level of midlife concerns. Whereas the association between men's caregiving strain and midlife transition was expected, the finding that better grandparent health was related to increased midlife concerns was puzzling. First, given that grandparent health and strain were only modestly correlated (i.e., poorer grandparent health was not always associated with increased sense of strain), the findings may reflect their truly different, independent relationships with midlife transition. Perhaps healthy grandparents are more involved in their adult sons' lives, possibly to the extent of being intrusive or overbearing. It is also possible that the finding is an artifact of methodology. The global, one-item assessment of grandparent's health was provided by the middle-aged parent and may not have accurately reflected the grandparents' perception of their health.⁸ Whereas proxy measures may be used when there is no other means of assessment available, findings that emerge with the measure should be viewed with caution. This study also did not consider how past family histories played into current caregiving relationships; recent evidence to this effect suggests that this is a promising area for further study (Whitbeck, Hoyt, & Huck, 1993). Nonetheless, this overall pattern of results does suggest that, for men, concerns over midlife issues are linked to some trepidation regarding "where they are going" (i.e., old age). In contrast, women's midlife adjustment seems to reflect a sense of competence about "where they have been" (i.e., successful rearing of adolescents) and perhaps optimism about their own future freedom.

Finally, different patterns for women and men again are illustrated when the association between

marital quality and midlife transition is considered. In particular, this study underscores the importance of good marital relations in middle-aged men's struggles with midlife issues. Although grandparent factors played a role in men's experience with the transition, the quality of the marital relationship explains the most variance. Interestingly, marital quality was related to women's midlife transition at the bivariate level, but was not a significant contributor in the context of the multivariate model, confirming a finding that arose in a previous study, with a different sample of parents of adolescents (Hamill, 1987). The strong association between marital quality and men's level of midlife concerns may indicate that men are more likely than women to rely on their spouses as sources of social support and personal validation (Shumaker & Hall, 1991). These results also support other studies which have demonstrated a close tie between the quality of men's marital relationships and their psychological well-being (e.g., Gove, 1972; Gove & Tudor, 1973). For women, issues with children overshadow marital issues, suggesting that a key element in women's sense of success in their midlife evaluations stems from their perceived success in raising children. Collectively, the findings that only adolescent variables, but not spousal or caregiving measures, were associated with mothers' midlife transition's suggest that women may enjoy feelings of success at their children's independence and be able to separate themselves from issues in family relationships with husbands and parents.

The present study provides researchers with new information regarding the experience of midlife transition in three-generation families. However, it does suffer from the limitations of a small sample, an ethnically homogeneous sample, a cross-sectional design, and the lack of observational data. The findings may be particular to intact, Caucasian, mid- to upper-middle-class families. These families are presumably in a position to secure the necessary services for an aging parent. It is likely that there would have been evidence of more caregiving strain in families from the lower socioeconomic classes because they would not have the option of obtaining paid help outside of the family to relieve strain. Moreover, these were well-functioning families whose target grandparent was in fairly good health and not a great burden. It would be interesting to examine the associations between midlife transition and grandparent care in a sample in which the middle generation is burdened by caring for an older generation that is

⁸One-item global self-report measures of physical health are used often in gerontological research and have been found to be positively related to more extensive measures of health (Rakowski, Mor, & Hiris, 1991).

physically and/or intellectually challenged (e.g., Alzheimer's patients). Additionally, adolescents in this sample were not selected for behavior problems or other difficulties. Heightened midlife issues may be revealed when the sandwich generation finds itself caught between two generations that are experiencing difficult developmental challenges. To get an accurate picture, however, these families must be studied over time, so that the contributions of prior relationships and family histories to present-day family functioning may be assessed.

In sum, this research gives us reason to continue examining adult development from a multigenerational perspective. Given the aging of the American population (Brody, 1981; Lang & Brody, 1983; Pifer & Bronte, 1986), it is likely that more middle-aged adults will find themselves facing midlife issues while fulfilling responsibilities and maintaining relationships across many different generations. Research that strives to understand individual development and family relations across generational lines should continue to be a promising avenue of study.

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