#### CHAPTER FIFTEEN

# Is Daily Life More Stressful during Middle Adulthood? David M. Almeida and Melanie C. Horn

How healthy are we? A national study of well-being at midlife. (2004) Brim, OG, Ryff, CD, & Kessler, RC (eds). Chicago IL The University of Chicago Press, 425-451

Despite increased attention to the understanding of middle adulthood over the past two decades, there exists great variability in how midlife is portrayed. Some portraits depict midlife as a time of "crisis" (e.g., Levinson 1978; Vaillant 1977), whereas others characterize it as the "prime of life" (e.g., Baruch 1984; Costa et al. 1986; Mitchell and Helson 1990; Neugarten 1968; Ryff 1989). We believe that one way to enhance our understanding of midlife is to explore the day-to-day stressors that middle-aged adults experience. In this chapter, we examine age and gender differences in the frequency and patterns of daily stressful experiences throughout adulthood. We focus primarily on stressors that distinguish middle adulthood from earlier and later periods of adulthood.

Midlife may best be characterized by change or adaptation in multiple arenas or life domains (Lachman and James 1997). These paths of adaptation may include changes in the social world (e.g., caring for sick parents), the physical realm (e.g., increased risk of chronic diseases), and the work world (e.g., returning to work, or beginning or changing careers). One way to chart these multiple paths is to examine the day-to-day stressors that coincide with such changes during adulthood. Using the patterns of developmental changes identified by Lachman et al. (1994) as our compass, we examine four types of age-related patterns of daily stressors: *linear paths*, where midlife is either the continual increase or decrease in frequency of daily stressors occurring from young to late adulthood; *midlife plateaus*, where midlife is marked by either the end or continuation of a particular aspect of daily stress; *midlife peaks* or *valleys*, where midlife is a time differentiated from both young and late adulthood; and *stability*, where there is no age change.

## Age Differences in Life Events

Researchers interested in the association between age and stressors have typically focused on major life events, those experiences that are disruptive to customary behavior patterns (e.g., Brown and Harris 1978;

Datan and Ginsberg 1975; Dohrenwend and Dohrenwend 1974; Holmes and Rahe 1967). These events, including marriage, birth of a child, divorce, and death of a family member or loved one, have often been used as markers of adult developmental transitions. Life-course theorists have argued that age or life stage is associated with the likelihood of certain events taking place (Brim and Ryff 1980; Hultsch and Plemons 1979). Age-related norms and expectations specify appropriate social timing for certain life events such as leaving the family home and getting married. In addition, biological changes such as menopause and musculoskeletal diseases have also been linked to life events, for example, completion of the childbearing years and retirement (Bond 1992; Fogel and Woods 1995; Gallant and Derry 1995; Older Women's League 1988).

Support for this life-course theory comes from research highlighting age differences in the frequency and nature of stressful life events across adulthood. Several investigators have shown that younger adults take on a number of roles within a short period of time (e.g., marriage, parenthood, work), while middle-aged and older adults typically experience other role changes, including departure of children, caretaking of parents, illness and death of parents, and retirement (Lowenthal, Thurner, and Chiriboga 1975; Rossi 1980). Younger persons, as compared with older ones, experience more events related to school, work, finances, and changes in personal relationships and living conditions. Older persons, on the other hand, report more stressors in environmental and social issues (Henderson, Byrne, and Duncan-Jones 1981; Hultsch and Plemons 1979). These findings support the notion that changes in social roles have implications for the types of life stressors that one experiences across the adult life span.

These age differences in life stressors can also be characterized through Lachman's patterns of developmental changes. For example, compared with older adults, younger people are more often involved in the formation and dissolution of marriages and re-marriage (Lazarus and De-Longis 1983). The likelihood of first-time marriage can thus be depicted as occurring on a young-to-midlife plateau. The likelihood of other life events, such as retiring or experiencing the death of a loved one, may best be defined by a linear increase across adulthood. Many major life events are more prevalent during middle adulthood, such as having one's children leave home, becoming a grandparent, and experiencing the death of one's parents. Thus the likelihood of these events represents midlife peaks.

#### Daily Stressors

In addition to examining the relationship between age and major life events, stress researchers have begun to consider the stressors and hassles of everyday life (Almeida, Wethington, and Kessler 2002; Almeida and Kessler 1998; Banez and Compas 1990; Bolger et al. 1989; Evans and Nies 1997; Lazarus and DeLongis 1983; Stone, Kessler, and Haythornthwaite 1991; Grzywacz et al., in press). Although studying life events is critical to understanding adult development, we believe that daily stressors tap into those more frequent experiences that often go unrecognized by researchers but are still meaningful to individuals. Although daily stressors may be less severe than life events, they nevertheless serve as personally significant and distinct events that represent attention-getting experiences in the ongoing lives of people.

An emerging literature has shown that daily stressors, such as spousal conflicts, home overloads, and work deadlines, play an important part in health and emotional adjustment (for a review, see Stone 1992). Minor daily stressors function not only by exerting their separate, direct effects but by piling up over a series of days to create persistent irritations, frustrations, and overloads, which may result in more serious stress reactions, such as anxiety and depression (Lazarus and DeLongis 1983; Lazarus and Folkman 1984; Pearlin et al. 1981; Pearlin and Schooler 1978; Serido, Almeida, and Wethington, in press). Daily stressors have also been found to be associated with negative mood (Bolger et al. 1989), daily distress (Almeida and Kessler 1998), and physical health problems (Horn and Almeida 2000; Grzywacz et al., in press; Larsen and Kasimatis 1991).

## Age Differences in Daily Stressors

As stated earlier, midlife may be a time of change in stressful experiences as a result of the type of roles that individuals take on during this period, including role changes in the family and work domains (Sales 1978). These role changes may be precipitated by one's grown children leaving home (Lowenthal and Chiriboga 1972), career transitions, such as reentry into the occupational domain or declining career opportunities (Ackerman 1990; Etaugh 1993), and renegotiating of family relationships (Blatter and Jacobsen 1993; Rollins 1989). In addition, Lachman and James (1997) point out that "being in the middle" often entails expanding and managing multiple responsibilities, such as caretaking for one's

aging parents and children. Such roles should expose midlife adults not only to specific types of major life events but also to unique daily stressors.

As is the case with major life events, some research has shown that the frequency and type of daily stressors are also age-graded. For example, older adults tend to have fewer desirable and undesirable daily events (Zautra et al. 1991). This decreased exposure may be the result of a reduction in social roles and time commitments across the life course. Gruber-Baldini and Verbrugge (1993) point out that with increasing age, individuals spend more time on personal and physical care, sleep, and personal activities, while spending less time on work and participation in sports. Further, Kanner et al. (1981) found that younger individuals experience more academic or social problems associated with their time of life and school attendance (e.g., wasting time, meeting school expectations and demands), whereas older individuals experience more economic concerns, such as stress about rising prices, investments, and taxes. These findings are consistent with other researchers' observations of age-related sources of role strain (Pearlin 1983).

Not only do we expect that the frequency or source of stressors will differ across the life span, but we also predict age-related differences in the personal meaning of daily stressors. Lazarus and DeLongis (1983) point out that how individuals appraise significance of a stressor is critical to how salient or disruptive that stressor will be. They argue that this may be the result of one's values, beliefs, commitments, and expectations that change across the life course. For example, health expectations decline among people as they age because they have more realistic concerns (Costa et al. 1986), as compared with many young adults who have unrealistic, overly optimistic beliefs about future health risks. Thus, how individuals cope or struggle with a disease or physical problem is in part influenced by their perceptions of its potential impact. Researchers looking at coping behavior have found age-related trends in people's appraisals of significant events such as cancer (Cohen 1980) and death or separations (Horowitz and Wilner 1980).

These findings suggest that daily stressful events hold varying significance at different developmental periods. Little is known, however, about age differences in the meaning and nature of day-to-day stressors themselves. One way to better understand the significance that daily stressors play in the lives of individuals is to explore the characteristics that make stressors unique, to take a detailed look at the types and dimensions of stressors that people experience. In this chapter, we consider the nature of daily stressors in two ways. First, we assess specific characteristics of

stressors by use of an investigator-based approach (e.g., Brown and Harris 1978; Wethington et al. 2002). Trained coders rated open-ended descriptions of daily stressors into type of stressors (e.g., arguments, overloads); they also looked at who was involved in the stressor. Second, the appraised meaning of stressors was assessed through respondents' descriptions and ratings of severity of stressors and what was at stake for them as a result of daily stressors. We believe that combining investigator-rated characteristics with respondents' subjective meaning provides a rich account of daily stressors that individuals experience at different points along the adult life course.

#### Gender and Daily Stressors

Although the primary focus of this chapter is on age differences in daily stressors, we recognize the importance of considering the role of gender in the frequency and nature of stressful experiences across adulthood. According to the social role perspective, men and women experience different levels and types of stressors because of the nature of the roles they enact (Gove 1972; Gove and Tudor 1973). Women's gender roles tend to be more nurturing, whereas men's roles are more instrumental (Gove and Tudor 1973). Thus, women's social roles require them to provide support to others, to be more empathetic, and to extend their concern to a wider network. Men's social roles, on the other hand, tend to expose them to more stressors related to work and finances. Using this gender social-role perspective and applying it to the experience of daily stressors, we expect that women will report more home- and network-related stressors and that men will report more stressors related to work tasks and overloads.

However, the question remains as to how age and gender interact to predict the frequency of daily stressful events. For example, although women may have more home-related stressors overall, such as tensions related to children, this may not be true for older women whose children are no longer living at home. Compared with women, men may report more overall frequent work stressors. This, however, may be true only for younger men who are starting a new job, or who have less control or less respect. Thus, to fully capture the nature of daily stressor across adulthood, we recognize age and gender as two important predictors of daily stressors.

#### **Methods**

Data for the present analyses are from the National Study of Daily Experiences (NSDE), one of the in-depth studies that are part of the National Survey of Midlife in the United States (MIDUS) performed under the auspices of the John D. and Catherine T. MacArthur Foundation Research Network on Successful Midlife Development (Orville Gilbert Brim, director). Respondents were 1031 adults (562 women, 469 men), all of whom had participated in the phone and questionnaire portions of the MIDUS (see Brim, Ryff, and Kessler, chap. 1 of this volume, for a description of the MIDUS project). Respondents in the NSDE were randomly selected from the MIDUS sample and received twenty dollars for their participation in the project. Of the 1242 MIDUS respondents we attempted to contact, 1031 agreed to participate, yielding a response rate of 83 percent. Respondents completed an average of seven of the eight interviews, resulting in a total of 7221 daily interviews.

Over the course of eight consecutive evenings, respondents completed short telephone interviews about their daily experiences. On the final evening of interviewing, respondents also answered several questions about their previous week. Data collection spanned an entire year (March 1996 to March 1997) and consisted of forty separate "flights" of interviews, with each flight representing the eight-day sequence of interviews from approximately 38 respondents. The initiation of interview flights was staggered across the day of the week to control for the possible confounding between day of study and day of week.

Table 1 compares characteristics of the NSDE subsample with the MIDUS sample from which it was drawn. The two samples had very similar distributions for age, marital status, and parenting status. The NSDE had slightly more females and better-educated and fewer minority respondents than did the MIDUS sample. Respondents for the present analyses were on average 47 years old. Seventy-seven percent of the women and 85 percent of the men were married at the time of the study. Forty-seven percent of the households reported having at least one child living in the home. The average family income was between \$50,000 and \$55,000. Men were slightly older than women and had similar levels of education.

Daily stressors were assessed through a semi-structured Daily Inventory of Stressful Events (DISE; Almeida 1998; Almeida, Wethington, and Kessler 2002). The inventory consisted of a series of stem questions asking whether certain types of daily stressors had occurred in the past twenty-four hours, along with a set of interviewer guidelines for probing affirmative responses and a series of structured questions that measured respondents' appraisal of the stressors. The stem questions, examples

TABLE 1 Demographic Comparison of the MIDUS Sample and the NSDE Subsample

Demographic	MIDUS <sup>a</sup>	NSDE <sup>b</sup>
Variable	(%)	(%)
Age		
Young adults, 25–39	33.2	33.5
Midlife adults, 40–59	46.0	45.0
Older adults, 60–74	20.8	21.5
Gender		
Males	48.5	45.5
Females	51.5	54.5
Education		
≤12 years	39.2	37.7
≥13 years	60.8	62.3
Marital status		
Married	64.1	65.4
All others	35.9	34.6
Children in household <sup>c</sup>		
Yes	39.0	37.8
No	61.0	62.2
Race		
Caucasian	87.8	90.3
African American	6.8	5.9
All other races	4.4	3.8

<sup>&</sup>lt;sup>a</sup>Respondents in the MIDUS survey who participated in the initial telephone interview and returned the two self-administered questionnaire booklets after the interview (N = 3032).

of the probe questions, and appraisal questions are provided in the appendix. The stem questions were created by combining several items from existing daily-stressor checklists (Bolger et al. 1989; Ekenrode and Bolger 1995). Our strategy was to elicit reports of broad types of stressors (e.g., interpersonal tension, work stressors) and to code for more specific characteristics of these stressors on the basis of the respondents' open-ended descriptions of what occurred.

The aim of the interviewing technique was to acquire a short narrative of each stressor that included descriptive information (e.g., topic or content of the stress, who was involved, how long the stressor lasted) as well as what was at stake for the respondent. Open-ended information for each reported stressor was tape-recorded, transcribed, and coded for several

<sup>&</sup>lt;sup>b</sup>Respondents in the NSDE study all of whom had previously participated in the MIDUS initial telephone interview and returned the two self-administered questionnaire booklets after the interview (N = 1031).

<sup>&</sup>lt;sup>c</sup>Whether respondent had at least one child age 18 or younger living in the house.

Table 2 Description and Interrater Coding Reliability of Daily Inventory of Stressful Events Measures

Coding Category	Description	Codes	Interrater Reliability
Content classification	Stressful events are categorized into one of seven broad classifications organized by interpersonal tensions, life domains, network events, and miscellaneous events. Next they are placed in one of 54 specific classifications. Broad classifications are listed at right, followed by the number of specific classifications associated with each heading.	Interpersonal tensions (21) Work/education (9) Home (9) Finances (3) Health/accident (5) Network (7) Miscellaneous (9)	Broad classification .90 Specific classification .66
Focus of involvement	Focus of involvement refers to who was involved in the event.	Respondent Other Joint	.88
Threat dimensions	The threat dimension describes the implications of the event for the respondent. Loss is the occurrence of a deficit. Danger is the risk of a future negative occurrence. Disappointment occurs when something does not turn out as the respondent had expected. Frustration occurs when the respondent has little or no control over the events. Opportunity is a chance for positive outcome.	Loss Danger Disappointment Frustration Opportunity	.74

TABLE 2 continued

Coding Category	Description	Codes	Interrater Reliability
Investigator- rated severity	The objective assessment of the severity of an event refers to the degree and duration of disruption and/or unpleasantness created for the respondent. Ratings range from 1, a minor or trivial annoyance, to 4, a severely disruptive event.	Low-severity events Medium-severity events High-severity events Extreme-severity events	.75
Subjective severity	The subjective assessment of severity is the respondent's assessment of the degree of stressfulness involved in the event.	Not at all stressful Not very stressful Somewhat stressful Very stressful	Not coded by raters
Primary appraisal domains	Primary appraisal domains refer to the respondent's report of how much the following areas were at risk or at stake in the situation: (1) disruption routine; (2) finances; (3) how respondent feels about self; (4) how others feel about respondent; (5) health or safety; (6) well-being of one close to respondent; (7) future plans.	Not at all A little Some A lot	Not coded by raters

characteristics. This investigator-based approach allowed us to distinguish between a stressful event (e.g., conflict with spouse) and the affective response to the stressor (e.g., crying or feeling sad). Another benefit of this approach was our ability to identify overlapping reports of stressors. In the present study, approximately 5 percent of the reported stressors were discarded because either they were solely affective responses or they were identical to a stressor that was previously described on that day.

Table 2 presents the description and interrater reliability of the DISE measures. For each stressor, expert coders rated (a) content classification

of the stressor (e.g., work overload, argument with spouse, traffic problem); (b) focus of who was involved in event; (c) dimensions of appraised threat (loss, danger, disappointment, frustration, opportunity); and (d) severity of stress. In addition, respondents provided reports of (e) degree of severity and (f) primary appraisal domains (i.e., areas of life that were at risk because of the stressor).

The first two measures in table 2 assess the objective nature of the stressor. Each stressor was initially placed into a content classification that combined the broad classification (e.g., argument) with specific content or topic of the stressor (e.g., housework). A pilot study of a national sample of 1006 adults was initially conducted to generate the content classification list of daily stressors common to adults in the United States. The initial list included eight broad classifications and thirty-nine specific classifications. This list was then lengthened to incorporate ten additional specific classifications of arguments and tensions and five other miscellaneous classifications. In the present analyses, we examined three of the broadcontent classifications: interpersonal tensions, network events, and work and home overloads. Interpersonal tensions included stressors involving disagreements and verbal arguments as well as nonconflictual but tense interactions with others. Network stressors were events that happened to close friends or relatives that were stressful for the respondent (e.g., sick friend). Overloads referred to stressors that involved having too much work at home or the workplace. In this preliminary examination, we choose these three classifications because of their prevalence and their purported links to the experience of middle adulthood. Interpersonal tensions, network events, and overloads accounted for 78 percent of all of the reported stressors. Another characteristic of daily stressors we measured was focus of involvement, which assessed whether other individuals were involved in the stressors, and if so, what their relation was to the respondent (Brown and Harris 1978).

The remaining measures in table 2 assess the meaning of the stressor for the respondent. Threat dimensions were the rated stressful implications for the respondent. These dimensions are similar to Lazarus and Folkman's (1984) dimensions of primary appraisal, with the addition of disappointment (an expected positive experience that did not occur) and frustration (stressors in which the respondent has little or no control). Investigator-rated severity ratings are similar to Brown and Harris's (1978) short-term contextual threat and are based on the degree of disruptiveness and unpleasantness associated with the stressor. The final two DISE measures were obtained from the respondents' own ratings (see appendix

for the items). These included the respondents' perceived or subjective severity of stressor and reports on seven primary appraisal domains (i.e., the degree of risk the stressor posed in various areas of life). Approximately 20 percent (800 events) of the stressors were rated by two coders. Using Kappa, we found that the interrater reliability ranged from .66 to .95 across all of the codes.

The documentation and guidelines for all of these ratings are provided in an interview and coding manual (Almeida 1998). In addition, all of the transcribed descriptions of daily stressors and their corresponding ratings are contained in an "electronic dictionary" stored in a computer spreadsheet. This dictionary consists of more than four thousand rated daily stressors and can be searched and cross-referenced by any of the DISE measures. Table 3 presents dictionary entries for six of these stressors. The first column shows the respondent's verbatim description of the stressor. The second and third columns list the broad-content classifications used in the present analysis as well as the specific classification. The fourth column shows the ratings for the focus of involvement and the relationship of the person if others were involved in the stressor. The fifth column lists the investigator's and respondent's severity ratings of the stressors, and the last column shows the respondent's primary appraisal ratings. Higher numbers in these final columns represent higher severity and greater perceived disruption.

## Results Frequency of Daily Stressors

The first goal of our analyses was to examine age differences in how often respondents experienced daily stressors. Across the eight study days, we calculated the percentage of days that respondents reported any daily stressors (i.e., an affirmative response to any of the stressor stem questions) and multiple daily stressors (i.e., an affirmative response to two or more of the stressor stem questions). On average, respondents reported experiencing at least one daily stressor on 39.4 percent of the study days and multiple stressors on 10.4 percent of the study days. According to these figures, people in our sample experienced at least one daily stressor three days each week and multiple stressors three days each month. Compared with men, women had more frequent days in which they reported any stressors (37.5 percent of study days versus 40.9 percent of study days; t = 5.1, p < .01) but had similar number of days involving multiple stressors (9.4 percent of study days versus 11.2 percent of study days).

Table 3 Examples of Daily Stressors and Coding

TABLE 5 Example	Content	Specific
Transcription	Classification	Classification
"I work on a number of different projects. I work in the finance department and today we have taxdeadline. We had quarterly income that I had todue, I had three wire transfers that I had to dohad people calling me many phone calls coming in that I had juggle all at once. Timely filed. Co-worker was gone so I was in charge of all of the banking and cash management for the day. We were short handed. And it was a Monday. I'm assistant to the chief financial officer. It took more time. I got through it all."	Overload	Time pressure
"I was helping open and close the store so I had to get up this morning, get my son ready, drag him to work, pick up somebody who didn't have a car, pick them up, take them to work, open the store, make sure they were okay, take him back for kindergarien, drop him off at the bus, go back to work, pick him up from the bus, run to swimming lessons for 45 minutes and then go back to work to close the store. I think that's a little bit stressful." (R had to open and close the store because the manager who usually does it was on jury duty.) "I feel good about myself for being able to get it all done today."	Overload	Time pressure
"I had a problem with an employee. And also today she called and had cancelled something I had ordered three months ago and now I have to start running and searching and waiting for something. It was a big disappointment. It wasn't an argument, it was her fear that she had ordered the wrong thing and she didn't want to go through the stress and stuff. Nor did I obviously. Both of us. Since she had doubts that she had done the right thing, she cancelled the order. So, it was very stressful for me."	Interpersonal tension	Job procedures
"I had a phone conversation with my mother about visiting my grandmother who's in the hospital. And the reasons why she would not go. It wasn't worth the argument. There's a girl who's living with her that my mother doesn't care for. Living with my grandmother. And she will not visit her because of this girl that is living with her. She'll visit at the hospital but not the home." (R's uncle is going to marry this girl, she's very young and he's quite a bit older.) "My grandmother being in the hospital I just don't think it's something we should be worrying about. I'm the only one who feels this way."	Interpersonal tension	Family responsibility
"It was regarding my mom. It's just that she was supposed to be picked up by a family member, and they didn't pick her up and didn't bother to call me. My mother is 86, so that's why it was was stressful for me."	Network	Family responsibility
"I have a close friend who has emotional problems. My friend also suffers from migraine headaches. I spent quite a bit if time with her today. I tried to comfort her. Yah, it interrupted my routine because I could not be at home to do things."	Network	Health/well-being

## Using the DISE Instrument

Focus/ Who Involved	Severity	Stake Dimensions
Self	Investigator rating 2 Subjective rating 2	Disrupting daily routine 1 Finances 1 Way feel about self 1 Way others feel about you 1 Physical health/safety 1 Health/well-being of close other 1 Plans for future 1
Self	Investigator rating 2 Subjective rating 2	Disrupting daily routine 3 Finances 3 Way feel about self 1 Way others feel about you 1 Physical health/safety 1 Health/well-being of close other 3 Plans for future 1
Joint/co-worker	Investigator rating 3 Subjective rating 1	Disrupting daily routine 4 Finances 4 Way feel about self 4 Way others feel about you 3 Physical health/safety 4 Health/well-being of close other 1 Plans for future 4
Joint/parent	Investigator rating 3 Subjective rating 2	Disrupting daily routine 2 Finance 1 Way feel about self 1 Way others feel about you 2 Physical health/safety Health/well-being of close other 1 Plans for future 1
Other/parent	Investigator rating 2 Subjective rating 4	Disrupting daily routine 3 Finances 1 Way feel about self 3 Way others feel about you 3 Physical health/safety 1 Health/well-being of close other 4 Plans for future 3
Joint/friend	Investigator rating 2 Subjective rating 3	Disrupting daily routine 4 Finances 1 Way feel about self 2 Way others feel about you 2 Physical health/safety 1 Health/well-being of close other 3 Plans for future 2

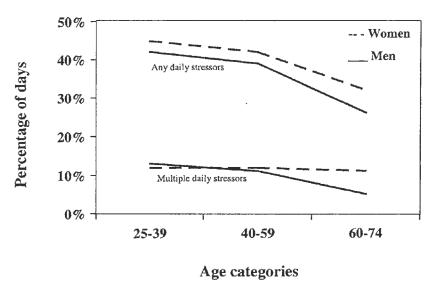


FIGURE 1. Frequency of daily stressors, by age and sex.

Figure 1 shows the pattern of age and gender differences in how often respondents reported any daily stressors and multiple daily stressors. We assessed these group differences using  $2 \times 3$  (gender  $\times$  age) ANOVAs with Tukey multiple comparison tests. The results revealed that age was negatively related to the frequency of experiencing any daily stressors (F(2, 1025) = 22.6, p < .01) and multiple daily stressors (F(2, 1025) =9.8, p < .01). The results of the Tukey tests suggested a young to midlife plateau. Young and midlife adults reported more frequent days of any stressors and multiple stressors than did older adults. Younger women reported experiencing any daily stressors most frequently (44 percent of the study days), whereas older men reported having daily stressors on the fewest days (25 percent of the study days). A slightly different way to examine the frequency of daily stressors is to assess who was most likely to have limited stress in their daily lives. We found that 12 percent of our participants experienced no daily stressors across the entire study period. Although these respondents did not differ by gender, they did differ by age. Only 8 percent of the young adults reported no daily stressors compared with 12 percent of the midlife adults and 19 percent of the older group  $(\chi^2 = 15.3, p < .001)$ . Taken together, these results suggest that overall, younger adults are more likely to experience daily stressors than their older counterparts.

## Content and Focus of Daily Stressors

The next set of analyses examined the types of daily stressors that respondents were most likely to experience according to the content classifications and focus categories taken from the DISE. First, we assessed the *frequency* of each of the content classifications and focus categories by calculating the percentage of study days during which respondents experienced each of these types of stressors. Second, we calculated the *proportion* of stressors that fell into each specific type of stressor category for each respondent. This strategy was employed to control for the fact that younger and midlife adults reported a larger absolute number of daily stressors than did older adults (see fig. 1). The numbers in table 4 represent the average frequency and proportions of each of the measures across the total sample and within each of the age groups.

The first column of table 4 shows the percentage of study days that the entire sample experienced each type of stressor. In terms of stressor content, the most frequent type of daily stressors was interpersonal tension, occurring on almost 24 percent of the study days. Overload and network stressors were much less common (occurring on 5.6 percent and 8 percent of the study days, respectively). The frequency of stressors, broken down by the focus of involvement, shows that stressors involving the respondent and another person (i.e., joint focus) occurred more frequently than did both types of stressors involving either the respondent only or other individuals. When stressors included other individuals, they most likely involved a spouse or partner.

Table 5 provides a summary of results from a series of  $3 \times 2$  ANOVAs with Tukey multiple comparisons that tested age and gender differences in content and focus of daily stressors. Consistent with our findings reported in figure 1, age was negatively related to a majority of subtypes of daily stressors. These analyses show a linear decrease across adulthood in the daily frequency of interpersonal tensions, stressors that involve only the respondent and someone else (self and joint focused), and stressors that involve a co-worker. Compared with older adults, younger and midlife adults also experienced more frequent overload stressors and stressors that involved children.

A somewhat different pattern emerged when we assessed age differences in these stressor characteristics as a proportion of all of their daily stressors. As with the frequency measure, age was negatively related to the proportion of overload stressors. Of the specific types of stressors that respondents experienced, younger and midlife adults reported a higher proportion of overloads than did older adults. However, older adults reported the highest proportion of network stressors and stressors that primarily involved another person (i.e., other focused). In terms of who else was involved in the stressors, older adults had the highest proportion

TABLE 4 Content and Focus of Daily

		Fr	equency (	of Daily Str	essors <sup>a</sup>			
			Men			Women		
Measure	Total Sample	25–39	40–59	60–74	25–39	40–59	60–74	
Content classifi	ication							
Argument/ tension	23.7	26.4	23.1	15.7	29.8	24.1	17.8	
Overload	5.6	6.6	5.1	1.3	7.0	6.5	4.0	
Network	8.0	6.7	6.3	4.7	9.0	9.8	9.8	
Focus of involv	ement							
Self	12.7	16.3	14.0	6.2	13.1	13.8	6.8	
Joint	26.5	29.0	25.1	16.9	33.3	27.4	2.5	
Other	5.3	4.0	4.7	3.6	4.9	6.4	6.9	
Others involved	i							
Spouse	8.2	9.6	7.7	7.0	10.3	7.1	8.0	
Child	6.7	4.8	5.5	1.9	9.3	9.0	4.6	
Co-worker	7.2	11.9	9.0	2.7	6.6	7.4	2.8	

<sup>&</sup>lt;sup>a</sup> Percentage of study days that respondents reported for each category of stressor.

of spouse-related events, midlife adults had the highest proportion of child-related events, and younger adults had the highest proportion of co-worker-related events.

The age-related patterns of the content and focus of daily stressors can be interpreted through the social roles that our respondents were likely to inhabit (Pearlin 1983). These results suggest that overloads and demands are a greater source of daily stressors for young and midlife adults, although the source of the demands might differ. Younger men's daily stressors were more likely than respondents in the other groups to revolve around overloads and co-workers. Midlife women reported the same percentage of overloads as did younger women but had a greater proportion of stressors that involved other people. Although overloads were not a common type of stressor for older adults, these respondents had the greatest proportion of network and spouse-related events.

Findings for gender differences revealed that women reported more frequent overload, network, and child-related stressors than did men. Men had more frequent stressors that involved a co-worker. Women also had a higher proportion of network stressors than did men. In fact, network stressors were more common than overloads for women of all age categories. More than 25 percent of stressors reported by older women were network stressors, compared with only 8 percent of the stressors for

<sup>&</sup>lt;sup>b</sup>Propotion of stressors that fell into each category.

Stressors, by Age and Gender

Proportion of Daily Stressors <sup>b</sup>							
		Men			Women		
Total Sample	25–39	40–59	6074	25–39	40–59	60–74	
52.5	52.3	51.1	52.3	58.2	51.6	47.7	
9.9 15.1	12.1 8.5	10.0 12.7	5.3 18.0	9.5 12.9	10.7 17.5	7.4 25.2	
25.7 63.3 10.8	32.7 63.5 5.6	29.8 60.1 10.0	24.1 60.7 15.1	20.6 70.9 7.8	25.2 62.3 12.3	19.4 60.4 19.9	
17.7 12.4 15.9	15.7 7.6 25.6	16.5 9.8 18.2	27.3 7.9 8.4	17.4 17.7 13.6	15.2 18.3 15.9	21.8 10.1 8.0	

younger men. Indeed, men were more likely to experience self-focused stressors, whereas women's stressors included other people. These findings are consistent with research that shows women are more sensitive than men to social interactions and develop closer and more extensive social networks (Kessler, McLeod, and Wethington 1985).

## Appraised Meaning of Stressors

As part of the DISE interview, respondents answered a series of structured and semi-structured questions that pertained to the appraised meaning of the stressor. These included dimensions of threat, the investigator and subjective rating of stressor severity, and primary appraisal domains (i.e., areas of life that were at risk because of the stressor). Table 6 provides a summary of the appraisal measures of daily stressors broken down by age and gender. The figures for the threat dimensions reflect the percentage of stressors that fell into each of five threat categories. Of the stressors experienced by the total sample, roughly 30 percent involved some sort of loss, nearly 37 percent posed danger, and 27 percent were frustrating or out of the control of the respondent. Table 6 also presents the mean levels of severity ratings. The total sample, on average, subjectively rated stressors as having medium severity, whereas objective coders rated, on average, that stressors posed low severity. Figures for the primary appraisal domains represent the amount of risk that stressors were

Table 5 Age and Gender Differences in Content and Focus of Daily Stressors

	Frequency	of Stressors	Proportion of Stressors		
Measure	Age	Gender	Age	Gender	
Content classific	ation				
Overload	10.9**	4.7**	4.5**	_	
	[Yg+Mid>Old]	[Women>Men]	[Yg+Mid>Old]		
Interpersonal tension	20.5**	_	_		
	[Yg>Mid>Old]				
Network	_	17.4**	11.1*	9.6**	
		[Women>Men]	[Old>Mid>Yg]	[Women>Men]	
Focus of involver	ment				
Self	14.5**			10.4**	
	[Yg>Mid>Old]			[Men>Women]	
Other	_	8.2**	15.7**	4.8*	
		[Women>Men]	[Old>Mid>Yg]	[Women>Men]	
Joint	20.6**	7.4**	4.2**		
	[Yg>Mid>Old]	[Women>Men]	[Yg>Mid+Old]		
Others involved					
Spouse			2.9*		
			[Old>Yg>Mid]		
Child	9.3**	25.7**	4.5**	18.4	
	[Mid>Yg>Old]	[Women>Men]		[Women>Men]	
Co-worker	17.5**	7.4**	9.3**	9.0**	
	[Yg>Mid>Old]	[Women>Men]	[Yg>Mid>Old]	[Men>Women]	

*Notes:* Figures in the table are significant F values. N = 1031.

perceived to have on seven areas of life. Daily stressors posed the most risk to disrupting the respondent's daily routine.

Next we examined age and gender differences in the appraisal measures of daily stressors. Table 7 provides results from a series of  $3 \times 2$  ANOVAs with Tukey multiple comparisons that tested for differences in threat dimensions, objective and subjective severity ratings, and primary appraisal domains. Significant age differences were observed in two of the threat dimensions—danger and frustration. Middle-aged and older individuals reported a greater proportion of dangerous stressors (stressors that pose the possibility of a future negative occurrence) than did younger adults. Middle-aged respondents reported having the least proportion of stressors that were frustrating compared with younger and older respondents.

Age and gender differences were also observed in subjective ratings of stressor severity. Younger and middle-aged respondents rated stressors as more disruptive and unpleasant than did older respondents, and women

<sup>\*</sup>p < .05. \*\*p < .01.

TABLE 6 Appraisal Measures of Daily Stressors, by Age and Gender

		Men				Women	
Measures	Total Sample	2539	40–59	60–74	25–39	40–59	60-74
Threat dimensions (%	of stressors) <sup>a</sup>						
Loss	29.7	33.5	29.4	22.0	29.8	28.7	27.9
Danger	36.5	33.7	37.2	37.5	32.2	40.4	37.9
Disappointment	4.2	4.3	4.3	2.7	5.4	4.4	4.0
Frustration	27.4	26.2	26.2	36.4	28.9	24.4	28.3
Opportunity	2.3	2.4	2.2	1.3	3.6	2.0	1.9
Severity (mean level) <sup>b</sup>							
Investigator rating	1.81	1.80	1.74	1.66	1.78	1.86	1.96
Subjective rating	2.69	2.62	2.50	2.27	2.88	2.87	2.75
Primary appraisal dom	ains (mean level)	) <sup>c</sup>					
Disrupting daily routine	2.30	2.46	2.30	2.03	2.37	2.31	2.07
Financial situation	1.30	1.41	1.33	1.40	1.29	1.21	1.17
Way feel about self	1.46	1.38	1.48	1.32	1.46	1.50	1.59
Way others feel about you	1.41	1.57	1.53	1.26	1.42	1.31	1.31
Physical health of safety	1.27	1.27	1.33	1.26	1.21	1.29	1.22
Health/well-being of others	1.49	1.38	. 1.52	1.70	1.50	1.50	1.50
Plans for the future	1.36	1.45	1.35	1.43	1.37	1.34	1.23

<sup>&</sup>lt;sup>a</sup>Percentage of stressors that were placed into each of the categories.

overall rated stressors as more severe than did men. Interestingly, there were no significant age or gender differences in the investigator ratings of stressor severity. This suggests that one's age or gender does not necessarily expose one to stressors that are inherently more severe, at least according to our trained coders. However, one's own perception of stressor severity may be age- and gender-graded, possibly because younger and middle-aged adults perceive events as relatively more dramatic than do older adults, or that older adults downplay the significance of stressors. Perhaps older individuals have learned to cope better with daily stressors and thus interpret stressors as less severe than do younger adults.

Significant age patterns were observed in the degree that stressors were perceived to disrupt daily routines and risk the way others felt about the respondent. Young and middle-aged respondents reported that stressors were more likely to pose greater risks in these areas than did older respondents. Middle-aged respondents also perceived their stressors as posing

<sup>&</sup>lt;sup>b</sup>Average severity rating across all stressors ranging from 1 (not at all stressful) to 4 (very stressful).

<sup>c</sup>Average rating across all stressors of how much risk each stressor posed ranging from 1 (none) to 4 (a lot).

TABLE 7 Age and Gender Differences in Appraisal Measure of Daily Stressors

2	any otressors	
Measures	Age	Gender
Threat dimensions		
Loss		_
Danger	3.0 [Mid+Old>Yg]	_
Disappointment	b-man-re-	_
Frustration	2.9* [Yg+Old>Mid]	
Opportunity Severity	_	
Investigator rating		_
Subjective rating	7.3**	29.7**
	[Yg+Mid>Old]	[Women>Men]
Primary appraisal domains		
Disrupting daily routine	7.7**	-
	[Yg+Mid>Old]	
Financial situation	3.5*	11.9
	[Mid>Yg+Old]	[Men>Women]
Way feel about self	_	_
Way others feel about you	4.4*	12.8**
·	[Yg+Mid>Old]	[Women>Men]
Physical health or saftey	- 0	
Health/well-being of others		
Plans for the future		

*Notes:* Figures in the table are significant F values. N = 1031.

more financial risk than did both the younger and older groups. Finally, gender differences showed that men appraised their stressors as posing a higher level of financial risk, whereas women appraised their stressors as posing more risk to the way others felt about them. These findings are consistent with the gender-role perspective that contends that women's roles involve interpersonal interactions and men's roles involve instrumental activities (Gove and Tudor 1973).

#### Conclusion

We hope this chapter has provided a glimpse into the characteristics and qualities of daily life during middle adulthood. By assessing multiple dimensions of daily stressors, we gain a more comprehensive and accurate portrait of this unique period of development. Our findings reveal that various patterns and contours mark the frequency and nature of daily stressors across the adult life course. Although there was not one clear

<sup>\*</sup>p < .05. \*\*p < .01.

and consistent pattern distinguishing midlife from other periods of life, a picture may emerge when we consider each of these patterns in turn.

First, young-to-midlife plateaus marked many characteristics of daily stressors. The initial set of analyses revealed that young and middle-aged individuals experienced a greater daily frequency of any stressors and multiple stressors than did older individuals. Such results are consistent with previous research documenting that older adults tend to experience fewer life events and daily stressors (Chiriboga 1997). Midlife and younger adults also perceived their stressors as more severe than did older adults. Midlife adults were also similar to younger adults in the amount of overloads they experienced as well as in the amount of disruption that stressors caused to their daily routines and to how others felt about them. Midlife and younger adults experienced a greater proportion of these types of stressors than older adults did.

However, the experience of daily stressors during midlife is not only patterned by plateaus but can also be characterized as a period distinct from younger and later adulthood, and represented by midlife peaks or valleys. Compared with both young adulthood and later life, midlife is a time during which there are significant increases in the proportion of stressors posing financial risk and in stressors involving children. On the other hand, midlife adults reported fewer frustrating stressors during which they felt little or no control. Such findings are consistent with previous work showing that although midlife is a time of increased responsibilities, it is also a peak period for competence and a sense of mastery (Lachman et al. 1994). Thus, midlife is also a unique period of the life course, one that can be differentiated from young and old adulthood.

Finally, many aspects of daily stressors characterize midlife as a time marking linear transitions from early adulthood through late adulthood. The frequency of interpersonal tensions decreases from young through midlife to older adulthood. On the other hand, the proportion of network and other focused stressors increases from young adulthood to midlife and continues to climb into older adulthood. Getting older exposes one to a greater proportion of stressors involving a close friend or relative. These findings point to the fact that midlife is also a time of being in the "middle" of the adult life course, where characteristics and processes that started in younger years continue through midlife toward older adulthood.

In this chapter we have attempted to address the question "Is daily life more stressful during middle adulthood?" The answer obviously depends on the group with which midlife adults are being compared and which aspect of daily stress is being considered. The quantity and quality of daily experiences certainly vary according to a person's position in the adult life course. Midlife adults encounter more frequent daily stressors than do older adults, and they experience different types of stressors than younger adults. Furthermore, the nature and meaning of the stressors also differ with age. Such descriptive findings set the stage for more important questions, such as how aspects of daily life explain age-related differences in physical health, social responsibility, and psychological well-being. This line of research would move us beyond documenting age differences in day-to-day life experiences to understanding how such experiences contribute to health and well-being during the middle adult years.

#### APPENDIX

The Daily Inventory of Stressful Events (DISE) is a semi-structured instrument consisting of three components: (1) a list of seven "stem" questions that pertain to occurrences of stressful events in various life domains; (2) a series of open-ended "probe" questions that ascertain a description of the stressful event; (3) a question regarding the perceived severity of the stressor; and (4) a list of structured "stake" questions inquiring about aspects of the respondent's life that were at risk because of the event. An affirmative response to the stem questions prompts the interviewer to probe for a detailed description of the event, which is followed by questions pertaining to "what was at stake" for the respondent as a result of the event.

#### Stem Questions

1. Did you have an *argument or disagreement* with anyone since this time yesterday?

No Yes

2. Since (this time/we spoke) yesterday, did anything happen that you could have argued about but you decided to let pass in order to avoid a disagreement?

No Yes

3. Since (this time/we spoke) yesterday, did anything happen at *work or school* (other than what you've already mentioned) that most people would consider stressful?

No Yes

4. Since (this time/we spoke) yesterday, did anything happen at *home* (other than what you've already mentioned) that most people would consider stressful?

No Yes

5. Many people experience *discrimination* on the basis of such things as race, sex, or age. Did anything like this happen to you since (this time/we spoke) yesterday?

No Yes

6. Since (this time/we spoke) yesterday, did anything happen to a *close* friend or relative (other than what you've already mentioned) that turned out to be stressful for you?

No Yes

7. Did *anything else* happen to you since (this time/we spoke) yesterday that most people would consider stressful?

No Yes

#### Examples of Probes for Description

Ask only if "yes" for the following stem questions [question numbers are in brackets]:

- 1. Think of the most stressful disagreement or argument you had since (this time/we spoke) yesterday. Who was that with? [1]
- 2. Think of the most stressful incident of this sort. Who was the person you decided not to argue with? [2]
- 3. What happened and why did you decide not to get into an argument about it? [2]
- 4. Think of the most stressful incident of this sort. What was the basis for the discrimination you experienced—your race, sex, age, or something else? [5]
- 5. Think of the most stressful incident of this sort. Who did this happen to? [6]
- 6. How does this affect your job? [3]
- 7. What kinds of things were said? [1, 2]
- 8. When did that happen? Was that some time yesterday or today? [All]
- 9. What happened and what about it would most people consider stressful? [All]
- 10. Have you had any problems with this in the past? [All]
- 11. How long has this been going on? [All]
- 12. Does this happen often? [All]
- 13. Was there anything out of the ordinary in this? [All]

## Subjective Severity Question

1. How stressful was this for you—very, somewhat, not very, or not at all?

#### David M. Almeida and Melanie C. Horn

- 1. Not at all  $\rightarrow$  Go to next stem question
- 2. Not very  $\rightarrow$  Go to next stem question
- 3. Somewhat  $\rightarrow$  Go to primary appraisal questions
- 4. Very  $\rightarrow$  Go to primary appraisal questions

#### Primary Appraisal Domains Questions

Rated on a scale of 1 to 4, 1 = Not at all; 2 = A little; 3 = Some; and 4 = A lot.

1. How much were the following things at risk in this situation: First, how much did it risk disrupting your daily routine—a lot, some, a little, or not at all?

1 2 3 4

2. How much did it risk your financial situation?

1 2 3 4

3. How much did it risk the way you feel about yourself?

1 2 3 4

4. How much did it risk the way other people feel about you?

1234

5. How much did it risk your physical health or safety?

1 2 3 4

6. How much did it risk the health or well-being of someone you care about?

1 2 3 4

7. How much did it risk your plans for the future?

1 2 3 4

#### REFERENCES

Ackerman, R. J. 1990. Career developments and transitions of middle-aged women. *Psychology of Women Quarterly* 14:513–30.

Almeida, D. M. 1998. Daily inventory of stressful events: Interview and coding manual. Manuscript. University of Arizona.

Almeida, D. M., and R. C. Kessler. 1998. Everyday stressors and gender differences in daily distress. *Journal of Personality and Social Psychology* 75:1–11.

Almeida, D. M., E. Wethington, and R. C. Kessler. 2002. The Daily Inventory of Stressful Experiences (DISE): An interview-based approach for measuring daily stressors. *Assessment* 9:41–55.

Banez, G. A., and B. E. Compas. 1990. Children's and parents' daily stressful events and psychological symptoms. *Journal of Abnormal Child Psychology* 18:591–605.

Baruch, G. K. 1984. The psychological well-being of women in the middle years.

- In Women in midlife, ed. G. K. Baruch and J. Brooks-Gunn, 161–80. New York: Plenum Press.
- Blatter, C. W., and J. J. Jacobsen. 1993. Older women coping with divorce: Peer support groups. *Women and Therapy* 14:141–55.
- Bolger, N., A. DeLongis, R. C. Kessler, and E. A. Schilling. 1989. Effects of daily stress on negative mood. *Journal of Personality and Social Psychology* 57:808–18.
- Bond, K. 1992. Osteoporosis. NAACOG'S Clinical Issues in Perinatal and Women's Health Nursing 3:497–508.
- Brim, O. G., and C. D. Ryff. 1980. On the properties of life events. In *Life-span development and behavior*, ed. P. B. Baltes and O. G. Brim, Jr., 3:363–87. New York: Academic Press.
- Brown, G. W., and T. O. Harris. 1978. Social origins of depression: A study of psychiatric disorder in women. London: Tavistock.
- Chiriboga, D. A. 1997. Crisis, challenge, and stability in the middle years. In *Multiple paths of midlife development*, ed. M. E. Lachman and J. B. James, 293–322. Chicago: University of Chicago Press.
- Cohen, F. 1980. Coping with surgery: Information, psychological preparation, and recovery. In *Aging in the 1980's: Psychological issues*, ed. L. W. Poon. Washington, D.C.: American Psychological Association.
- Costa, P. T., R. R. McCrae, A. B. Zobderman, H. E. Barbano, B. Lebowitz, and D. M. Larson. 1986. Cross-sectional studies of personality in a national sample. 2. Stability in neuroticism, extraversion, and openness. *Psychology and Aging* 1:144–49.
- Datan, N., and L. H. Ginsberg, eds. 1975. *Life-span developmental psychology: Normative life crises.* New York: Academic Press.
- Dohrenwend, B. S., and B. P. Dohrenwend. 1974. *Stressful life events: Their nature and effects.* New York: John Wiley.
- Eckenrode, J., and N. Bolger. 1995. Daily and within-day event measurement. In *Measuring stress: A guide for health and social scientists*, ed. S. Cohen, R. C. Kessler, and L. U. Gordon, 80–101. New York: Oxford University Press.
- Etaugh, C. 1993. Women in the middle and later years. In *Psychology of women: A handbook of issues and theories*, ed. F. L. Denmark and M. A. Paludi, 213–46. Westport, Conn.: Greenwood Publishing.
- Evans, M. S., and M. A. Nies. 1997. Effects of daily hassles on exercise participation in perimenopausal women. *Public Health Nursing* 14:129–33.
- Fogel, C. I., and N. F. Woods. 1995. Midlife women's health. In *Women's health care: A comprehensive handbook*, ed. C. I. Fogel and N. F. Woods, 79–96. Thousand Oaks, Calif.: Sage Publications.
- Gallant, S. J., and P. S. Derry. 1995. Menarche, menstruation, and menopause: Psychosocial research and future directions. In *The psychology of women's health: Progress and challenges in research and application*, ed. A. L. Stanton, and S. J. Gallant, 199–260. Washington, D.C.: American Psychological Association.
- Gilligan, C. 1982. *In a different voice: Psychological theory and women's development.* Cambridge: Harvard University Press.
- Gove, W. R. 1972. The relationship between sex roles, marital status, and metal illness. *Social Forces* 52:992–1003.
- Gove, W. R., and J. F. Tudor. 1973. Adult sex roles and mental illness. *American Journal of Sociology* 98:812–35.

- Gruber-Baldini, A. L., and L. M. Verbrugge. 1993. Differences in activity patterns due to chronic conditions in the Baltimore Longitudinal Study of Aging. Paper presented at the meetings of the Gerontological Society of America, New Orleans.
- Grzywacz, J. G., D. M. Almeida, S. D. Neupert, and S. L. Ettner. In press. Stress and socioeconomic differentials in physical and mental health: A daily diary approach. *Journal of Health and Social Behavior*.
- Henderson, S., D. G. Byrne, and P. Duncan-Jones. 1981. *Neurosis and the social environment*. New York: Academic Press.
- Holmes, T. H., and R. H. Rahe. 1967. The social readjustment rating scale. *Journal of Psychosomatic Research* 11:213–18.
- Horn, M. C., and D. M. Almeida. 2000. Women's daily health during middle adulthood. In *Psychology and Health*, forthcoming.
- Horowitz, M. J., and N. Wilner. 1980. Life events, stress, and coping. In *Aging in the* 1980's: *Psychological issues*, ed. L. W. Poon, 363–74. Washington, D.C.: American Psychological Association.
- Hultsch, D. F., and J. K. Plemons. 1979. Life events and life-span development. In *Life-span development and behavior*, ed. P. B. Baltes and O. G. Brim, Jr., 3:1–31. New York: Academic Press.
- Kanner, A. D., J. C. Coyne, C. Schaefer, and R. S. Lazarus. 1981. Comparison of two models of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine* 4:1–39.
- Kessler, R. C., J. D. McLeod, and E. Wethington. 1985. The costs of caring: A perspective on sex differences in psychological distress. In *Social support: Theory, research, and applications*, ed. I. G. Sarason and B. R. Sarason, 491–507. Dordrecht, The Netherlands: Martinus Nijhoff.
- Lachman, M. E., and J. B. James, eds. 1997. *Multiple paths of midlife development*. Chicago: University of Chicago Press.
- Lachman, M. E., C. Lewkowicz, A. Marcus, and Y. Peng. 1994. Images of midlife development among young, middle-aged, and older adults. *Journal of Adult Development* 1:201–11.
- Larsen, R. J., and M. Kasimatis. 1991. Day-to-day physical symptoms: Individual differences in the occurrence, duration, and emotional concomitants of minor daily illnesses. *Journal of Personality* 59:388–423.
- Lazarus, R. S., and A. DeLongis. 1983. Psychological stress and coping in aging. *American Psychologist* 38:245–54.
- Lazarus, R. S., and S. Folkman. 1984. *Stress, appraisal, and coping*. New York: Springer-Verlag.
- Levinson, D. J. 1978. Season's of a man's life. New York: Knopf.
- Lowenthal, M. F., and D. A. Chiriboga. 1972. Transition to the empty nest: Crisis, change, or relief? *Archives of General Psychiatry* 26:8–14.
- Lowenthal, M. F., M. Thurner, and D. A. Chiriboga. 1975. Four stages of life: A comparative study of men and women facing transitions. San Francisco: Jossey-Bass.
- Mitchell, V., and R. Helson. 1990. Women's prime of life: Is it in the 50's? *Psychology of Women Quarterly* 14:451–70.
- Neugarten, B. L. 1968. The awareness of middle age. In *Middle age and aging*, ed. B. L. Neugarten, 93–98. Chicago: University of Chicago Press.

- Older Women's League. 1988. The picture of health for midlife and older women in America. *Women and Health* 14:53–91.
- Pearlin, L. I. 1983. Role strains and personal stress. In *Psychological stress: Trends in theory and research*, ed. H. B. Kaplan, 3–32. New York: Academic Press.
- Pearlin, L. I., E. G. Menaghan, M. A. Lieberman, and J. P. Mullan. 1981. The stress process. *Journal of Health and Social Behavior* 22:337–56.
- Pearlin, L. I., and C. Schooler. 1978. The structure of coping. *Journal of Health and Social Behavior* 19:2–21.
- Rollins, B. C. 1989. Marital quality at midlife. In *Midlife myths: Issues, findings, and practice implications*, ed. S. Hunter and M. Sundel, 184–94. Newbury Park, Calif.: Sage.
- Rossi, A. S. 1980. Life-span theories and women's lives. Signs 6:4–32.
- 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.
- Sales, E. 1978. Women's adult development. In Women and sex roles: A social psychological perspective, ed. I. H. Frieze, J. E. Parsons, P. B. Johnson, D. N. Ruble, and G. L. Zellman, 157–90. New York: W. W. Norton.
- Serido, J., D. M. Almeida, and E. Wethington. In press. Conceptual and empirical distinctions between chronic stressors and daily hassles. *Journal of Health and Social Behavior*.
- Stone, A. A. 1992. Selected methodological concepts: Mediation and moderation, individual differences, aggregation strategies, and variability of replicates. In *Stress and disease process*, ed. P. McCabe, N. Schneiderman, and A. Baum, 55–71. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Stone, A. A., R. C. Kessler, and J. A. Haythornthwaite. 1991. Measuring daily events and experiences: Decisions for the researcher. *Journal of Personality* 59:575–607.
- Vaillant, G. E. 1977. Adaptation to life. Boston: Little, Brown.
- Wethington, E., D. Almeida, G. W. Brown, E. Frank, and R. C. Kessler. 2002. The assessment of stress exposure. In *Assessment in behavioral medicine*, ed. A. K. Vingerhoets, 113–34. New York: Taylor and Francis.
- Zautra, A. J., J. F. Finch, J. W. Reich, and C. A. Guarnaccia. 1991. Predicting the everyday life events of older adults. *Journal of Personality* 59:507–38.