Although older workers are retiring from their regular jobs at earlier ages, many are continuing to participate in the labor market in some way after their retirement. Indeed, although 50 percent of U.S. workers have officially retired by age 60, only 11 percent have fully withdrawn from the workforce by that time (Doeringer, 1990). The focus of the present article is bridge employment, namely, employment that takes place after a person's retirement from a full-time position but before the person's permanent withdrawal from the workforce.

Despite its increasing prevalence and its importance to the labor market, bridge employment has received surprisingly little attention from social science researchers. Macroeconomic data exist on the incidence of bridge employment and the wages it commands, but there has been very little empirical research on the noneconomic factors that influence individuals to pursue bridge employment or on the noneconomic benefits of such employment (Feldman, 1994).

The goals of this study, then, were twofold. First, using a framework based on the continuity theory of aging (Atchley, 1989), we examined influences on individuals' desires to achieve continuity through bridge employment as well as constraints on their being able to do so. Second, we examined the impact of bridge employment on the quality of life in retirement and the roles that volunteer work and leisure activity can play as alternatives for bridge employment in facilitating adjustment to retirement.

THEORY AND MODEL

The antecedents and consequences of bridge employment are perhaps best conceptualized in the context of Atchley's (1989) continuity theory of aging. As Atchley suggested, in making choices about how to adapt to aging, "middle-aged and older adults attempt to preserve and maintain existing structures . . . and prefer to accomplish this objective by using continuity, i.e., applying familiar strategies in familiar arenas of life" (1989: 183).

Atchley's Continuity Theory of Aging

Overview. Atchley's continuity theory informs our understanding of postretirement employment in several ways. First, as have other gerontologists, Atchley argues that older workers need to maintain daily routines. Particularly after participating in an emotionally involving or fast-paced occupation, older individuals find it difficult to adjust to no structure at all. Like the stress paradigm used in research on job change and unemployment (Brett, 1984; Leana & Feldman, 1992), continuity theory suggests that absence of work is psychologically stressful because individuals experience "rolelessness" (Hornstein & Wapner, 1985; Richardson & Kilty, 1991). Life without full-time work, then, is not best experienced without any daily structure.

Second, Atchley's work suggests that older workers try to sustain structure in their daily lives by participating in the activities they value most highly. For individuals who have been deeply involved in volunteer work, hobbies, or leisure pursuits, that would mean continued or increased involvement in those activities after retirement.

Third, individuals who have high career identification are likely to seek continuity through some form of work involvement. Among older workers whose sense of self-worth is highly tied to their
professional accomplishments, participation in bridge employment, part-time work, temporary work, consulting, or professional associations will be more avidly sought and more rewarding when achieved.

Fourth, Atchley’s theory suggests that individuals need to sustain levels of satisfying social contact in old age that are roughly comparable to their earlier levels. For individuals who choose to continue valued activities within workplaces, that might mean using bridge employment to sustain contact with coworkers and colleagues. For individuals who choose to achieve continuity of valued activities outside workplaces, that might mean increased psychological investment in family, outside-of-work friends, and others with whom they share interests in hobbies, travel, volunteer work, or travel. According to Atchley (1989), then, maintaining continuity in structure entails sustaining social contacts as well as participating in valued activities.

**Constraints and opportunities.** Although Atchley’s (1989) continuity theory provided the foundation for the model presented here, three other issues implicit in Atchley’s work need to be more explicitly examined. These issues center on the constraints and opportunities individuals face in achieving continuity as they age.

First, as much as older individuals want to continue valued activities in retirement, aging constrains their freedom to do so. A gifted artisan can no longer fully pursue his craft if stricken with Parkinson’s disease; a talented executive may no longer be able to pursue her career as fully if she becomes responsible for an ill spouse. Consequently, although the desire for continuity remains high, the ability to achieve continuity through old routines is not always possible.

Second, although aging presents constraints, it can also present opportunities to more fully engage in activities older workers value highly and to decrease involvement in activities they value less. For example, some older workers who retire have more opportunities to spend extended time with their spouses and to travel—opportunities not as readily available when they were employed full-time.

Third, although research on adjustment to retirement has typically examined either continued activity in work or continued participation in volunteer or leisure activities, the options facing retirees are not dichotomous. Indeed, it is likely that after individuals “retire,” many will participate in both bridge employment and outside-of-work activities, but they will alter the scope and degree of their respective investments in these two spheres of life, depending upon their changing circumstances.

**A General Model of the Antecedents and Consequences of Postretirement Activity**

The general framework we used to understand the antecedents of bridge employment, volunteer work, and leisure activity—and the consequences of these postretirement activities—appears in Figure 1.

**Antecedents of bridge employment, volunteer work, and leisure.** As Figure 1 suggests, the amount and type of postretirement activity depend upon older workers’ desires for continuity of structure, valued activities, career identification, and social contact. A variety of individual differences, job factors, and family status factors are hypothesized to affect individuals’ desires to achieve continuity through bridge employment, volunteer work, and/or leisure pursuits.

How individuals choose to sustain continuity of life structure will be closely tied to the level of their affective attachment to their present jobs and the level of their affective attachment to outside work activities. That is, whether individuals will try to sustain continuity of life structure through bridge employment, volunteer work, or leisure pursuits will depend upon the value placed on each of these activities.

For instance, individuals who have high career identification and high job satisfaction would be disconcerted by an abrupt end to work because they value participation in work and contact with coworkers highly (Cytrynbaum & Crites, 1989). For individuals with high career identification but low job satisfaction, bridge employment in the same field but in a different firm might be the most attractive alternative (Feldman, 1994; Kim & Feldman, 1998). In contrast, individuals who have low career identification but high investment in outside interests would be more likely to sustain continuity of structure through such nonwork activities as volunteering and hobbies.

**Postretirement activity and adjustment to retirement.** Continuity theory also presents a useful perspective for understanding adjustment to life in retirement and the roles that bridge employment, volunteer work, and leisure might play in that adjustment. We focused on two indicators of postretirement adjustment: overall life satisfaction and retirement satisfaction (cf. Figure 1).

Atchley’s work suggests that sudden, abrupt transitions from work to retirement are often associated with high levels of stress. This finding is consistent with other work on career transitions (cf. Nicholson, 1984), which suggests that disruptions in important roles and important contexts cause individuals to feel some disorientation during transition
periods (Bradford, 1979). Bridge employment, then, might be instrumental in facilitating adjustment to retirement as careers begin to decelerate.

Conversely, for individuals who have high investments in outside-of-work activities and friendships, declining bridge employment opportunities (or only participating in bridge employment in a minor way) would increase the quality of life. Thus, older workers may decline bridge employment because they have alternative activities that they want to actively pursue in more depth (Feldman, 1994). Indeed, volunteer work and leisure activity may themselves involve use of skills and abilities developed throughout the career (for instance, teaching reading after retiring from a professor’s job).

**HYPOTHESES**

**Antecedents of Bridge Employment**

Within the context of continuity theory, then, we first examine the factors that influence retirees’ decisions to pursue bridge employment. The variables most frequently theorized about in this regard include individual differences, job factors, and family status factors (cf. Feldman, 1994; Kim & Feldman, 1998).

**Individual differences.** Older workers’ health is a major constraint on their ability to achieve continuity of life structure through further participation in the workforce. When employees have significant health problems, such as cancer or heart disease, they may be less able to continue performing their jobs effectively (Colsher, Dorfman, & Wallace, 1988; Muller & Boaz, 1988). Even if employees with severe health problems can still perform their jobs effectively, they may want to spend what limited time they have available with friends and family members or in valued leisure pursuits. Consequently, good health will be positively related to the pursuit of bridge employment.

**Hypothesis 1.** Good health will be positively related to participation in bridge employment.

For similar reasons, age is hypothesized here to be inversely associated with individuals’ decisions to pursue bridge employment. Particularly from the perspective of constraints on achieving continuity through work, the oldest retirees are the most likely to have health problems (such as arthritis or heart disease) that make continued participation in the workforce more difficult (Anderson & Burkhauser, 1993; Colsher et al., 1988).

**Hypothesis 2.** Age will be inversely related to participation in bridge employment.

**Job factors.** Organizational tenure is expected to be positively related to participation in bridge employment. An employee’s working beyond a point at which she or he could financially afford to retire reflects, at least in part, strong affective commitment to career and coworkers (Godofsky, 1988). Also, the longer an individual’s organizational tenure, the greater the discontinuity full retirement will entail. Consequently, long-time employees may be more likely to desire bridge employment after “retiring” to sustain continued participation in a valued activity and to sustain valued contacts with colleagues.

**Hypothesis 3.** Organizational tenure will be positively related to participation in bridge employment.

As we have suggested in earlier work (Kim & Feldman, 1998), older workers’ decisions about retirement are strongly influenced by expectations about future income. Consistent with Atchley’s continuity theory, retirees’ decisions to engage in bridge employment will be influenced by their desire to closely approximate their current standards of living after leaving their full-time jobs (Daniels & Daniels, 1991).

**Hypothesis 4.** Salary at time of retirement will be inversely related to participation in bridge employment.

**Hypothesis 5.** Amount of pension benefits will be inversely related to participation in bridge employment.

Many downsizing organizations have offered early retirement incentives to decrease their workforces. Hypothesis 6 proposes that older workers who have already turned down repeated early retirement incentives will have a greater preference for continuing in the workforce. The desire side of continuity theory suggests that older workers who have previously declined early retirement incentives have a greater commitment to their jobs or careers; thus, they may have a greater desire to
continue working as well. The constraint aspects of continuity theory also imply that older workers who have previously declined early retirement incentives have greater financial need that prevents them from dropping out of the workforce altogether (Feldman, 1994; Kim & Feldman, 1998).

Hypothesis 6. Retirees who have turned down previous opportunities for early retirement are more likely to engage in bridge employment.

In addition, individuals who receive retirement counseling are hypothesized here to be more likely to engage in bridge employment. In the context of acceptance of early retirement incentive programs, participation in retirement counseling programs may make opportunities for bridge employment more salient to retirees and may make the procedures to follow to take advantage of these opportunities much clearer (Rosen & Jerdee, 1989; Taplin, 1989). Moreover, retirement counseling often stresses to retirees the need to maintain structure in their lives and thereby further sensitizes them to the nonfinancial functions bridge employment can serve.

Hypothesis 7. Employees who receive retirement counseling will be more likely to engage in bridge employment than employees who do not receive such counseling.

Family status. As noted earlier, one of the greatest discontinuities associated with full retirement is lack of social interaction with others. For this reason, in Hypothesis 8 we propose that unmarried retirees are more likely to accept bridge employment than their married counterparts. For married employees, social interaction with spouses can at least partially substitute for continued interaction with colleagues (Bradford, 1979; Fengler, 1975); for unmarried retirees, bridge employment is likely to be more critical in maintaining social contact with others.

However, if retiring employees have spouses who are still working outside the home, full retirement might be a less attractive option. They will not have the companionship of their spouses to replace their interactions with coworkers; that is one reason why many married couples try to time their retirements together (Erdner & Guy, 1990). In terms of sustaining a similar level of interactions with others, then, retiring employees with still-working spouses are more likely to continue in bridge employment themselves.

Hypothesis 8. Unmarried retirees are more likely to engage in bridge employment than married retirees.

Hypothesis 9. Retirees whose spouses are currently working are more likely to engage in bridge employment than retirees whose spouses are not currently working.

Hypothesis 10 proposes that retirees with dependent children are more likely to engage in bridge employment. Here, the reasons are largely financial (Daniels & Daniels, 1991). Retirees who are still supporting children will need more money to sustain their present standards of living and thus will desire bridge employment to supplement their pensions.

Hypothesis 10. Retirees who are still financially supporting their children will be more likely to engage in bridge employment than retirees who no longer have any dependent children.

The research on gender and early retirement has yielded mixed results. One stream of research suggests women live longer than men, so their health (and thus their ability to work productively) is likely to remain better for a longer period of time (Feldman, 1994). Women may also stay in the workforce longer because of their greater "career disorderliness" (Kilty & Behling, 1985); that is, women move into and out of the workforce more than men owing to family responsibilities. Thus, women may be less likely to have accumulated enough savings and pension benefits to make bridge employment financially unnecessary.

On the other hand, much of the research on gender effects in retirement decisions was conducted in the 1970s, when there were fewer women with high career commitment in the workforce and pay differentials between women and men were even greater than they are today. In addition, much of the retirement literature has focused on individual retirement benefits and has not measured household income, savings, and inheritances (because of difficulties obtaining such confidential information). Consequently, spouse's income may be as good a predictor of retirement decisions as an individual's own income. Thus, gender was included here for exploratory purposes, but no formal hypothesis was tested.

Consequences of Bridge Employment

Continuity theory can also inform understanding of older workers' satisfaction with retirement and satisfaction with life in general. Here the focus is on the effects of participation in bridge employment on retirement satisfaction and life satisfaction.
Bridge employment. Because people's sense of well-being is closely tied to their ability to create a sense of continuity in their lives, participation in bridge employment should be positively related to retirement satisfaction and life satisfaction. This relationship might be especially strong for highly skilled professionals, whose sense of self-identity is so closely tied to work (Bradford, 1979; Sonnenfeld, 1988).

Although it is often assumed that bridge employment occurs with the last full-time employer, almost half of bridge employees end up working for different organizations (Doeringer, 1990). Thus, bridge employment is positively linked to greater psychological well-being, but the effects may be even stronger for retirees working for their former employers (Feldman, 1994). For these individuals, the continuity of structure, valued activities, career identification, and social contact will be even greater. Therefore, we might expect that individuals who have bridge employment with their long-term employers will have more positive attitudes about retirement and their lives in general.

Hypothesis 11. Participation in bridge employment will be positively related to retirement satisfaction and life satisfaction.

Hypothesis 12. Bridge employment with a former employer will be more strongly related to retirement satisfaction and life satisfaction than bridge employment with a different employer.

Volunteer Work and Leisure Pursuits

Although the main focus of this study was on bridge employment, previous research on attitudes of retirees suggests that activity level, social contact, and daily structure—whether work-related or not—are all positively related to retirement satisfaction and life satisfaction as well (Hornstein & Wapner, 1985). A possible explanation for why some retirees adjust readily to retirement even without bridge retirement, then, is that they might be actively involved in volunteer work or other leisure pursuits.

For many older workers whose self-identity is closely tied to work, retirement may signal the loss of valued activities (Cytrynbaum & Crites, 1989). In terms of continuity theory, then, Hypotheses 13 and 14 propose that active participation in volunteer work and leisure pursuits also serves to counteract the rolelessness that many older workers face in retirement (Feldman, 1994; Richardson & Kilty, 1991).

Hypothesis 13. Participation in volunteer activities will be positively related to retirement satisfaction and life satisfaction.

Hypothesis 14. Participation in leisure activities will be positively related to retirement satisfaction and life satisfaction.

Most of the antecedents of bridge employment identified earlier have also been studied in the context of satisfaction with retirement and overall life satisfaction (Feldman, 1994). Consequently, these other variables—individual differences, job factors, and family status—were all included as predictors of retirement and life satisfaction as well.

METHODS

Research Site

The research site for this study was the University of California (UC) system. The UC system offered three successive early retirement incentive programs in the early 1990s. The sample for this study consisted of faculty members who accepted the last of these three early retirement incentives in 1994. To be eligible for this early retirement incentive program, the sum of a professor's age and years of service needed to be at least 73.

Retirement benefits in the UC system are basically calculated by multiplying the service factor by the age factor by the salary factor. Basically, the service factor is the number of years of service in the system, the age factor is the employee's age at time of retirement, and the salary factor is the employee's average monthly salary calculated over the 36 consecutive months in which salary was highest. As an incentive to get faculty to retire early, the university added five years to the service factor, three years to the age factor, and 7 percent to the salary factor in calculating pension benefits. Retiring faculty were also given a lump sum bonus of three months' salary. Finally, as an additional incentive, faculty were eligible to return for part-time or temporary employment after retirement.

Sample

There were 924 professors who accepted the early retirement incentive offer in 1994 and were thereby also eligible for bridge employment after that time. In 1999, we sent surveys to faculty members at addresses available through university records. Surveys were deliverable to 879 of those professors, of whom 371 returned surveys, thus yielding a response rate of 42 percent. The number
of individuals surveyed and the response rate compare favorably with those of recently published articles on the same issue; for example, in our earlier study of bridge employment (Kim & Feldman, 1998), we surveyed 603 potential retirees and obtained 233 responses, obtaining a response rate of 38.6 percent.

The present sample closely mirrors the population of professors retiring from the University of California as a whole in 1994. Data obtained from the UC system indicate that the mean age of retiring faculty members in 1994 was 59 years; five years later, the mean age of the present sample was 65.2. The gender composition of the group retiring in 1994 was 90 percent male; this sample, too, was 90 percent male. At the time of their retirement, 89 percent of the faculty members taking the early retirement incentive were full professors; 89 percent of the participants in this study were full professors at time of retirement. The mean monthly salary of faculty retiring in 1994 was $7,238; in this sample, the mean monthly salary at the time of retirement was between $7,000 and $8,000. Both demographically and financially, then, the present sample appears to be representative of the entire group of faculty who accepted early retirement incentives at the same time.

Dependent Variables

Five dependent variables were used in this study. To test Hypotheses 1–10, we used three dependent variables to assess the type and amount of bridge employment. To test Hypotheses 11–14, we used two attitudinal variables to assess retirement satisfaction and overall life satisfaction. 

Extent of bridge employment. The first dependent variable measured the total amount of bridge employment in which an early retiree was presently engaged. Response categories were 0 (no bridge employment), 1 (occasional or temporary bridge employment), 2 (regular part-time bridge employment), and 3 (full-time bridge employment). The mean on this variable was 1.32 (s.d. = 1.12). Thirty-six percent of the respondents had no bridge employment; 11 percent had temporary or occasional bridge employment; 36 percent worked part-time on a regular basis; and 17 percent had full-time bridge employment.

Bridge employment inside the university. The second dependent variable assessed the extent to which faculty were currently engaged in bridge employment at the university from which they had retired. The response categories were 0 (no bridge employment), 1 (worked one quarter or semester), 2 (worked two quarters), and 3 (worked the entire school year—two semesters or three quarters). The mean on this variable was 0.97 (s.d. = 1.29). Sixty percent of the respondents had no bridge employment at their university; 8 percent worked one quarter or semester; 5 percent worked two quarters; and 27 percent worked yearround.

Bridge employment outside the university. The response categories were 0 (no bridge employment outside the university), 1 (temporary or occasional outside bridge employment), 2 (regular part-time employment outside the university), and 3 (full-time bridge employment outside the university). The mean on this variable was 0.63 (s.d. = 1.06). Sixty-five percent of respondents held no outside-UC bridge employment; 13 percent worked in bridge jobs outside the university system on a temporary or occasional basis; 15 percent worked regularly in part-time bridge jobs; and 6 percent worked full-time in bridge jobs outside the university system.

Retirement satisfaction. Retirement satisfaction was measured by a three-item Likert scale adapted from Floyd et al. (1992). A sample item was “After leaving your full-time job at UC, how easy or difficult were the first few months?” Because the different items had different response categories, responses were standardized so that the mean of the scale equaled zero and the standard deviation equaled one. The alpha for the scale was .72.

Life satisfaction. Overall life satisfaction was measured by a four-item Likert scale; items were adapted from Diener, Emmons, Larson, and Griffin (1985). Response categories ranged from 1, “strongly disagree,” to 5, “strongly agree.” A sample item was “If I could live my life over, I would change almost nothing.” To obtain consistency with the retirement satisfaction scale, we standardized responses so that the mean of the scale equaled zero and the standard deviation equaled one. The alpha for the scale was .84.

Independent Variables for Bridge Employment Analyses

In analyses where the three bridge employment measures were used as dependent variables, the independent variables employed were individual differences, job factors, and family status. More detail on these independent variable measures appears below.

Individual differences. The study included a self-report health status measure. Retirees were asked, “How do you rate your health compared to other people at your age?” (1, poor, to 4, excellent). The mean for this item was 3.38 (s.d. = 0.60). Retirees also responded to an open-ended question...
about their age; as reported above, the mean age was 65.2 (s.d. = 4.17).

**Job factors.** Respondents responded to an open-ended question about years of service in the UC system. The mean on this organizational tenure variable was 27.74 (s.d. = 7.09).

Respondents were also asked to report their monthly salary at the time of retirement and their current monthly pension benefit (1, under $2,000, to 10, over $10,000). The mean for salary was 7.28 (s.d. = 1.98); that is, the mean monthly salary at time of retirement was between $7,000 and $8,000. The mean pension benefit was 5.23 (s.d. = 1.91); that is, the mean monthly pension benefit was between $5,000 and $6,000. The third job factor assessed whether respondents had been eligible for the previous two early retirement incentive programs but had declined them. Fifty percent fit this profile; the other half of the sample had not been eligible for the previous early retirement incentive programs. The fourth job factor tapped whether respondents had attended a retirement counseling program at UC; 76.4 percent had done so, and 23.6 percent had not.

**Family status.** Retirees were asked their marital status; 83 percent of the sample was currently married. Respondents were also asked whether their spouses/partners were working outside the household. Forty percent of the spouses/partners were employed outside the household; 60 percent were not. Respondents were asked to indicate their gender as well. As noted earlier, 90 percent of the sample’s members were men.

To assess the number of dependent children, retirees were asked if they were currently financially supporting their children (either because their children were under 18, were still in college, or were living at home as young adults). Thirty-three percent of respondents were still supporting children, and 67 percent were no longer doing so.

**Independent Variables for Retirement and Life Satisfaction**

**Bridge employment.** The main focus of this part of the study was on the relationships between bridge employment and retirement satisfaction and life satisfaction. That is, the extent of bridge employment at the University of California and the extent of bridge employment outside of UC were both used as predictors of the attitudinal outcomes.

**Volunteer and leisure activities.** Retirees were asked whether they were currently involved in volunteer work; 35.2 percent were currently involved in such activity, and 64.8 percent were not. Retired faculty were also asked how often they participated in leisure activities. Responses ranged from 1, never, to 4, often. The mean for this item was 3.46 (s.d. = 0.63).

**Other independent variables.** The variables identified earlier as antecedents of bridge employment—individual differences, job factors, and family status—have also been frequently studied as antecedents of retirement satisfaction and life satisfaction (Feldman, 1994). To more fully understand the role of bridge employment in predicting retirement satisfaction and life satisfaction, then, we entered these other

<table>
<thead>
<tr>
<th>TABLE 1 Correlations*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>1. Bridge employment</td>
</tr>
<tr>
<td>2. Bridge employment inside the university</td>
</tr>
<tr>
<td>3. Bridge employment outside the university</td>
</tr>
<tr>
<td>4. Retirement satisfaction</td>
</tr>
<tr>
<td>6. Health</td>
</tr>
<tr>
<td>7. Age</td>
</tr>
<tr>
<td>8. Tenure at the university</td>
</tr>
<tr>
<td>9. Monthly salary at retirement</td>
</tr>
<tr>
<td>10. Monthly pension benefit</td>
</tr>
<tr>
<td>11. Previous early retirement declined</td>
</tr>
<tr>
<td>12. Received retirement counseling</td>
</tr>
<tr>
<td>13. Married</td>
</tr>
<tr>
<td>14. Working spouse</td>
</tr>
<tr>
<td>15. Dependent children</td>
</tr>
</tbody>
</table>

* n = 335. For correlations greater than .10, p < .05; for correlations greater than .14, p < .01; for correlations greater than .18, p < .001.
independent variables into the regression equations as well. A correlation matrix of all the variables in the study appears in Table 1.

RESULTS

Antecedents of Bridge Employment

The first set of results concerns the impact of individual differences, job factors, and family status on participation in bridge employment. These results are reported in Table 2, in which the dependent variable is the extent of bridge employment, in Table 3 (for bridge employment inside UC), and in Table 4 (for bridge employment outside UC).

Hierarchical regression analyses were used to analyze the data. In each regression equation, individual differences were entered in the first step, job factors were entered in the second step, and family status variables were entered in the last step.

Individual differences. Hypothesis 1, on health, was strongly supported. Across all three measures of bridge employment, good health was significantly related to bridge employment. Hypothesis 2, on age, was also strongly supported. Older retirees were significantly less likely to engage in bridge employment either inside or outside the university and, if they did, it was significantly less likely to be full-time.

Job factors. As predicted, organizational tenure was significantly related to engaging in all types of bridge employment (Hypothesis 3). Professors who had more years of service in the UC system were significantly more likely to engage in bridge employment, particularly in the university system (see Table 3).

Hypothesis 4 was also strongly supported. Across all three measures of bridge employment, the higher a retiree’s salary, the less likely he or she was to engage in any type of bridge employment. Hypothesis 5 was generally not supported. Pension benefits were not significantly related to bridge employment in the data presented in either Table 2 or Table 4. Although pension benefits were significantly related to bridge employment when they were initially entered into the regression equations shown in Table 3, they were not significant in the final step.

As the formula for calculating retirement benefits given above illustrates, the amount of benefits was tied directly to prior annual compensation, so that it is likely most of the common variance between these two variables was absorbed by the salary measure. As Table 1 indicates, pension benefits and salary were correlated at the .001 level.

Hypothesis 6, on the effects of having previously declined early retirement incentives, was not supported. Indeed, the results were significant in the opposite direction. That is, employees who had declined previous early retirement incentives were less likely (rather than more likely) to engage in any type of bridge employment.

Hypothesis 7 was not supported. Participation in retirement counseling was not significantly related to engaging in bridge employment in any of the regression analyses.

Family status. The hypothesis on marital status (Hypothesis 8) was not supported. Unmarried retir-

### TABLE 2
Hierarchical Regression Results for Bridge Employment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypothesis</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>2.594*</td>
<td>2.218</td>
<td>2.036</td>
</tr>
<tr>
<td>Health</td>
<td>1</td>
<td>0.323***</td>
<td>0.298***</td>
<td>0.281***</td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>-0.018***</td>
<td>-0.017**</td>
<td>-0.016**</td>
</tr>
<tr>
<td>Tenure at the university</td>
<td>3</td>
<td>0.043*</td>
<td>0.041*</td>
<td>0.041*</td>
</tr>
<tr>
<td>Monthly salary at retirement</td>
<td>4</td>
<td>-0.158***</td>
<td>-0.162**</td>
<td>-0.162**</td>
</tr>
<tr>
<td>Monthly pension benefit</td>
<td>5</td>
<td>-0.061</td>
<td>-0.058</td>
<td>-0.058</td>
</tr>
<tr>
<td>Previous early retirement declined</td>
<td>6</td>
<td>-0.269**</td>
<td>-0.265**</td>
<td>-0.265**</td>
</tr>
<tr>
<td>Received retirement counseling</td>
<td>7</td>
<td>0.306</td>
<td>0.377</td>
<td>0.491</td>
</tr>
<tr>
<td>Married</td>
<td>8</td>
<td></td>
<td></td>
<td>0.248**</td>
</tr>
<tr>
<td>Working spouse</td>
<td>9</td>
<td></td>
<td></td>
<td>0.130*</td>
</tr>
<tr>
<td>Dependent children</td>
<td>10</td>
<td></td>
<td></td>
<td>-0.347</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>0.056</td>
<td>0.131</td>
<td>0.182</td>
</tr>
</tbody>
</table>

\[ R^2 \]

Incremental \[ R^2 \]

\[ n = 335. \]

\[ * p < .05 \]

\[ ** p < .01 \]

\[ *** p < .001 \]
TABLE 3
Hierarchical Regression Results for Bridge Employment inside the University

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypothesis</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>2.408</td>
<td>2.145</td>
<td>2.009</td>
</tr>
<tr>
<td>Health</td>
<td>1</td>
<td>0.242**</td>
<td>0.228**</td>
<td>0.214**</td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>-0.029***</td>
<td>-0.023***</td>
<td>-0.021***</td>
</tr>
<tr>
<td>Tenure at the university</td>
<td>3</td>
<td></td>
<td>0.037**</td>
<td>0.035**</td>
</tr>
<tr>
<td>Monthly salary at retirement</td>
<td>4</td>
<td></td>
<td>-0.133**</td>
<td>-0.129**</td>
</tr>
<tr>
<td>Monthly pension benefit</td>
<td>5</td>
<td></td>
<td>-0.030*</td>
<td>-0.028</td>
</tr>
<tr>
<td>Previous early retirement declined</td>
<td>6</td>
<td></td>
<td>-0.498***</td>
<td>-0.526**</td>
</tr>
<tr>
<td>Received retirement counseling</td>
<td>7</td>
<td></td>
<td>-0.015</td>
<td>-0.014</td>
</tr>
<tr>
<td>Married</td>
<td>8</td>
<td></td>
<td></td>
<td>0.219</td>
</tr>
<tr>
<td>Working spouse</td>
<td>9</td>
<td></td>
<td></td>
<td>0.351*</td>
</tr>
<tr>
<td>Dependent children</td>
<td>10</td>
<td></td>
<td></td>
<td>0.192**</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td>-0.020</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R²</th>
<th>Incremental R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.055</td>
<td>0.081***</td>
</tr>
<tr>
<td></td>
<td>0.178</td>
</tr>
</tbody>
</table>

* n = 335.
*p < .05
**p < .01
***p < .001

TABLE 4
Hierarchical Regression Results for Bridge Employment outside the University

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypothesis</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>2.269</td>
<td>2.164</td>
<td>2.011</td>
</tr>
<tr>
<td>Health</td>
<td>1</td>
<td>0.375***</td>
<td>0.368***</td>
<td>0.354**</td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>-0.041**</td>
<td>-0.032**</td>
<td>-0.029**</td>
</tr>
<tr>
<td>Tenure at the university</td>
<td>3</td>
<td></td>
<td>0.034*</td>
<td>0.032*</td>
</tr>
<tr>
<td>Monthly salary at retirement</td>
<td>4</td>
<td></td>
<td>-0.159***</td>
<td>-0.154***</td>
</tr>
<tr>
<td>Monthly pension benefit</td>
<td>5</td>
<td></td>
<td>-0.061*</td>
<td>-0.053</td>
</tr>
<tr>
<td>Previous early retirement declined</td>
<td>6</td>
<td></td>
<td>-0.271**</td>
<td>-0.287**</td>
</tr>
<tr>
<td>Received retirement counseling</td>
<td>7</td>
<td></td>
<td>0.346</td>
<td>0.341</td>
</tr>
<tr>
<td>Married</td>
<td>8</td>
<td></td>
<td></td>
<td>0.309</td>
</tr>
<tr>
<td>Working spouse</td>
<td>9</td>
<td></td>
<td></td>
<td>0.204*</td>
</tr>
<tr>
<td>Dependent children</td>
<td>10</td>
<td></td>
<td></td>
<td>0.110**</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td>-0.379</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R²</th>
<th>Incremental R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.051</td>
<td>0.081***</td>
</tr>
<tr>
<td></td>
<td>0.175</td>
</tr>
</tbody>
</table>

* n = 335.
*p < .05
**p < .01
***p < .001

Employees were not more likely to engage in bridge employment than their married counterparts.

In contrast, Hypothesis 9 was supported. If spouses were still in the workforce, retirees were significantly more likely to engage in some type of bridge employment. The results were statistically significant in all three regression equations.

Hypothesis 10 was consistently supported as well. Having children to support was positively and significantly related to bridge employment.

As noted earlier, gender was added in this third step of the equation for exploratory purposes. It was not significantly related to any of the measures of bridge employment.

Consequences of Bridge Employment, Volunteer Work, and Leisure

The second set of results concerns the impact of bridge employment and other variables on retirement satisfaction and life satisfaction. These results are reported in Tables 5 and 6.
Hierarchical regression analyses were again used to analyze the data. In the first step of each regression equation, the two bridge employment variables (inside UC and outside UC) were entered, along with the two alternative activities variables, volunteer work and leisure activity. Then, as in the previous analyses, individual differences were added in the second step, job factors in the third, and family status variables in the fourth.

**Bridge employment.** Hypothesis 11 was consistently supported. The more extensive a retiree’s involvement in bridge employment, both within and outside the university, the more likely he or she was to be satisfied with both retirement and life in general. Both results were statistically significant.

Hypothesis 12 was partially supported. Participation in bridge employment inside UC was more strongly associated with life satisfaction than was participation in bridge employment outside UC. However, inside-UC bridge employment was not more strongly related to retirement satisfaction than outside-UC bridge employment was.

**Volunteer and leisure activities.** Hypothesis 13 was partially supported. Retirees who engaged in volunteer activities were significantly more likely to have higher life satisfaction (Table 6). Participation in volunteer activities was positively related to retirement satisfaction when it was first entered into the regression equation, but it was not significantly related to retirement satisfaction in the final step of the equation (step 4, Table 5). The drop in significance is most likely due to the fact that volunteer activity is more highly correlated with the amounts of salary \((r = .12)\) and pension \((r = .12)\) than it is with retirement satisfaction itself \((r = .04)\). Thus, when the financial variables are added, they absorb the common variance with volunteer work.

Hypothesis 14 was supported. Engaging in leisure activities was significantly related to both retirement and life satisfaction.

Two other results on volunteer work and leisure activity are relevant here, too. First, as hypothesized earlier, volunteer work is a likely alternative means of providing continued activity in retirement. In the correlation matrix (Table 1), the relationship between bridge employment and volunteer work is significantly negative; that is, the more individuals engaged in bridge employment, the less likely they were to engage in volunteer work. The same significant, negative relationship occurred between bridge employment and leisure activity; the more individuals engaged in bridge employment, the less likely they were to engage in leisure activity. Thus, at some level, there is some substitution of volunteer work and leisure activity for paid employment in retirement.

Second, and perhaps surprisingly, the income variables (salary and pension) were positively related to
TABLE 6
Hierarchical Regression Results for Life Satisfaction*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypothesis</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.231</td>
<td>-0.021</td>
<td>0.426</td>
<td>0.390</td>
<td></td>
</tr>
<tr>
<td>Bridge employment inside the university</td>
<td>0.034**</td>
<td>0.027**</td>
<td>0.028**</td>
<td>0.025**</td>
<td></td>
</tr>
<tr>
<td>Bridge employment outside the university</td>
<td>0.033**</td>
<td>0.032**</td>
<td>0.031**</td>
<td>0.028**</td>
<td></td>
</tr>
<tr>
<td>Volunteer work</td>
<td>0.235***</td>
<td>0.212**</td>
<td>0.205*</td>
<td>0.201*</td>
<td></td>
</tr>
<tr>
<td>Leisure activity</td>
<td>0.031***</td>
<td>0.038*</td>
<td>0.035*</td>
<td>0.030*</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>1</td>
<td></td>
<td>0.370***</td>
<td>0.366***</td>
<td>0.364***</td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>-0.034*</td>
<td>-0.031</td>
<td>-0.033</td>
<td></td>
</tr>
<tr>
<td>Tenure at the university</td>
<td>3</td>
<td></td>
<td>0.003</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>Monthly salary at retirement</td>
<td>4</td>
<td></td>
<td>0.052</td>
<td>0.051</td>
<td></td>
</tr>
<tr>
<td>Monthly pension benefit</td>
<td>5</td>
<td></td>
<td>0.067**</td>
<td>0.068**</td>
<td></td>
</tr>
<tr>
<td>Previous early retirement declined</td>
<td>6</td>
<td></td>
<td>0.115</td>
<td>0.110</td>
<td></td>
</tr>
<tr>
<td>Received retirement counseling</td>
<td>7</td>
<td></td>
<td>0.084</td>
<td>0.081</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>8</td>
<td></td>
<td></td>
<td>0.017</td>
<td></td>
</tr>
<tr>
<td>Working spouse</td>
<td>9</td>
<td></td>
<td>-0.211*</td>
<td>-0.187*</td>
<td></td>
</tr>
<tr>
<td>Dependent children</td>
<td>10</td>
<td></td>
<td>-0.722</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.095</td>
<td>0.132</td>
<td>0.188</td>
<td>0.228</td>
<td></td>
</tr>
<tr>
<td>Incremental R²</td>
<td>0.037***</td>
<td>0.056***</td>
<td>0.040***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* n = 335.
** p < .01
*** p < .001

participation in volunteer work and leisure pursuits (see Table 1). As noted earlier, the more income employees had at the time of retirement, the less likely they were to engage in bridge employment. No longer working, these highly paid retirees may have engaged more extensively in volunteer work and leisure activities to sustain continuity of structure. Alternatively, financially well-off older workers may have had greater assets with which to pursue expensive leisure activities such as travel, thereby making full retirement even more attractive.

Individual differences. As in previous studies, retirees in good health were significantly more likely to be satisfied with retirement and with their lives in general (*p < .001*).

Age was inversely related to both retirement satisfaction and life satisfaction, but not significantly so. Although age was significant when first entered into the equations shown in Tables 5 and 6, it was not significant when the full model was presented. Not surprisingly, age was positively correlated with salary; in the university formula, age is also positively correlated with amount of pension benefits. It appears that these two financial variables absorbed the common variance with age when they were entered into the equations in step 3.

Job factors. Organizational tenure was not significantly related to either retirement satisfaction or life satisfaction. Faculty salaries at the time of retirement were significantly related to retirement satisfaction (Table 5) but were not significantly related to overall life satisfaction (Table 6). Conversely, the size of pension benefits was significantly related to life satisfaction but not to retirement satisfaction.

Declining previous early retirement incentives was not significantly related to either retirement satisfaction or overall life satisfaction. Receiving preretirement counseling was significantly, positively related to retirement satisfaction (*p < .05*), but it was not significantly related to overall life satisfaction.

Family status. Married retirees were not significantly more satisfied with retirement or their lives in general. Retirees whose spouses continued to work were significantly less satisfied with retirement and with their lives in general. Retirees still financially supporting children were significantly less satisfied with their lives in general, but they were not significantly less satisfied with retirement. Gender did not account for significant variance in either satisfaction variable.

DISCUSSION

The present article identifies antecedents highly correlated with participation in bridge employment and the positive effects that bridge employment (as well as volunteer work and leisure activity) can have on older workers' attitudes toward retirement and their lives in general. Our study also suggests the usefulness of continuity theory in understand-
ing both the antecedents and consequences of bridge employment. In this final section, we consider directions for future theory development, methodological improvement, and implications for management practice.

Theory

Of the hypotheses in this study that were not supported, the one which deserves the greatest attention in future research is individuals' having declined previous early retirement incentives. Surprisingly, declining previous early retirement programs was negatively related to engaging in bridge employment. One possible explanation for this finding is that previous decliners are holding onto their regular jobs until they can accumulate enough income to retire, and then they retire fully. Another possibility is that previous decliners are holding onto their regular jobs until they are certain they want to retire and, once certain, they retire completely (Feldman, 1994; LaRock, 1996). In either event, future research on this issue is warranted.

The issue of gender and its relationship with early retirement and bridge employment is a complicated one on which there is conflicting evidence. As noted above, women as a group earn less than men and consequently may have less money on which to fully retire without bridge employment (Clark, 1988; George, Fillenbaum, & Palmore, 1984). On the other hand, it is very difficult to study gender issues in retirement without obtaining hard data on spouses' incomes as well, since gender effects can be confounded with family wealth effects. In the years ahead, then, gender effects need to be more closely investigated, preferably in samples with greater proportions of female employees.

One variable not measured in the present study but important for understanding bridge employment is satisfaction with the job (and career) held at the time of retirement (Schmitt & McCune, 1981). Although attitudes toward work have been studied in the context of early retirement decisions, they have not been studied in the context of bridge employment decisions. Because the people in the sample in the present study had retired several years previously, retrospective attitudinal data were not collected. However, in future research, the relationships between job/career attitudes and participation in bridge employment should be more fully explored.

As predicted, bridge employment was strongly related to both retirement satisfaction and general psychological well-being. Although the effects of bridge employment at the same organization are marginally stronger than the effects of bridge employment with a different organization, the magnitude of the differences was smaller than expected. Anecdotal comments from respondents suggest at least three possible explanations for the results.

First, some retirees who were dissatisfied or disenchanted with their last jobs were happy to pursue bridge employment with different organizations and felt more greatly appreciated by them. As noted above, then, job attitudes at the time of retirement may have important mediating effects. Second, several respondents noted that the university broke their psychological contracts with them when setting up the conditions for bridge employment; for instance, faculty members were removed from their regular offices. Third, although some bridge retirees were no longer working in the UC system, they were still using their skills and abilities in related areas like consulting.

Another possible theoretical extension of continuity theory to the retirement issue concerns Schein's (1990) notion of "career anchors." Schein's work suggests that individuals develop distinct patterns of career attitudes, needs, and values as they mature and that these stable anchors guide their future career decisions.

Although there is no a priori reason to expect individuals with different career anchors to have different needs for continuity, it is quite possible that individuals with entrepreneurial career anchors might be more successful in seeking out or creating appropriate bridge employment opportunities for themselves. For example, unlike their peers with managerial competence career anchors, individuals with entrepreneurial career anchors do not necessarily seek traditional, full-time, employment in large organizations, which are usually reluctant to take on older employees unwinding their careers (Feldman & Bolino, 1997). Moreover, although individuals age 50 or older comprise only 27 percent of the U.S. population, they account for 74 percent of all personal financial assets (Alsop, 1997: 686). Consequently, older workers may be more financially able to start new ventures as well (Alsop, 1997: 686).

The results here also suggest that volunteer work and leisure pursuits may be useful alternatives for, and complements to, bridge employment in sustaining continuity. As Table 1 suggests, participation in bridge employment is inversely related to participation in volunteer work and leisure activity. However, volunteer work and leisure pursuits are also significantly and positively related to quality of life in retirement. Although volunteer work and leisure activity are not as strongly related to retirement satisfaction as bridge employment is,
the relationships are still strong. Here, too, both dissatisfaction with a current job and previous involvement with volunteer work and leisure pursuits may help explain individuals' decisions to sustain continuity through nonwork activities.

Finally, it should be noted that continuity theory is somewhat underspecified in its formulation and predictions. For example, Atchley (1989) used continuity of structure, continuity of valued activities, and continuity of social contact as components of a generalized construct of continuity. However, older workers have different opportunities for, and constraints on, achieving continuity in these three areas of life via bridge employment, volunteer work, and leisure. Thus, in future research, a finer-grained approach to measuring continuity is needed to more fully explain postretirement behavior.

Methodological Limitations

The use of survey methodology here made possible the investigation of a wide variety of antecedents of bridge employment in the same research project. However, the use of a cross-sectional design does not allow inferences of causality. Longitudinal research following older workers from preretirement decision making through bridge employment is clearly needed.

In addition, the present design creates some problems of common method variance. There is no reason to suspect distortions in self-reports of demographic or family status, but employees may distort responses on health and financial status (Anderson & Burkhauser, 1985). As noted above, the self-reported sample statistics here closely approximate archival data on the same variables. If employee survey responses could be linked with verifiable archival data, however, even greater confidence could be put into the results.

One of the difficulties in conducting research on retirement is the sampling problem. Like the present study, most research in this area has investigated one occupational group or one organization at a time. Consequently, important occupational differences in the availability and the desirability of bridge employment are not frequently studied. For instance, continuity theory may be more applicable to faculty and other high-paid professionals for three reasons: (1) they may experience fewer accidents and physical ailments as a result of the work itself (particularly in contrast to physical laborers, for instance), (2) some physical disabilities they experience, such as severe arthritis, may not prevent them from continuing in their professions, and (3) professionals in the service sector have greater opportunities for bridge employment than workers in the manufacturing sector (Doeringer, 1990).

Similarly, there may be important cross-cultural differences in how older workers respond to early retirement incentives. For example, in earlier work (Feldman & Kim, 1998), we found that Korean companies tended to target workers in their 30s and 40s for early retirement and typically offered one-time, lump-sum bonuses (instead of higher pension benefits) as retirement incentives. Consequently, cross-national sampling is also a critical need in future research.

Another sampling issue that needs to be addressed here is the difference between private sector and public sector employees. Offers of early retirement incentives are supposed to be noncoercive, but many employees in the private sector appear to fear they will subsequently be laid off (without corresponding benefits) if they do not accept these incentives (Godofsky, 1988). Generalizations from public sector organizations to private sector ones, then, should be made conservatively.

Management Practice

This research, along with previous work on early retirement and bridge employment, highlights the usefulness of bridge employment in sustaining the psychological well-being of middle-aged and older workers. The results here suggest two key implications for managers dealing with retirement issues as well.

First, there may be a great deal of uncertainty and misunderstanding about the nature of bridge employment opportunities available to retirees. Although the transactional elements of the psychological contract (such as pay levels) were clearly conveyed to retirees during their preretirement counseling, many problems were created by the relational, or nonmonetary, elements of these agreements. Bridge retirees were frequently surprised to find that many of the support services they had taken for granted, such as office space, secretarial support, and assignment to courses previously taught, had been withdrawn. In managing early retirement and bridge employment opportunities, then, organizations need to provide older workers with more realistic previews of what the bridge employment experience will be like.

Second, bridge employment may also be an excellent way for organizations to resolve important staffing issues. Opportunities for bridge employment may be very effective in inducing older workers to retire early (Kim & Feldman, 1998). In addition, at a time when more and more organizations are turning to contingent workers to solve staffing
problems, bridge employees are often a better-trained and more readily available alternative than other contingent staff.

In the United States alone, over 2.5 million people retire each year (Herz, 1995). Better utilization and management of bridge employees may turn out to be an important component of effective staffing in the future, as corporations themselves bridge from large core workforces to more fluid structures. Indeed, in the future, bridge employment as a distinct form of employment may be integrated as yet one more way in which individuals and organizations alike create “boundaryless careers” and “boundaryless organizations” (Arthur & Rousseau, 1996).

REFERENCES


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