

**Retirement and Post-Retirement Work  
Intentions during an Economic Downturn**

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Workforce aging represents one of the greatest HR challenges facing organizations today. Demographic trends in most developed countries have created a competitive environment in which many organizations face looming large-scale workforce retirements and potential shortages of skilled replacement workers. Although financial need has long been recognized as an important reason why older people continue to participate in the labor force beyond typical retirement age, pensions, savings, and other retirement programs offer many of these workers an opportunity to retire from their primary job. As a consequence, many organizations plan or have implemented programs that they hope will help to retain aging workers. The increasing use of alternative work arrangements (e.g., bridge retirement programs) to manage workforce retirement patterns reflects growing recognition about the importance of non-financial work features for retaining older workers.

In early 2008, the rapid decline in economic conditions in the U.S. erased a substantial portion of retirement and other savings and pensions. In this environment, financial need regained prominence as a major deterrent to retirement among members of the Baby Boom cohort. However, most research on non-financial determinants of retirement intentions prior to 2008 was conducted in a relatively positive economic environment. For example, during the period 1987-2007, the U.S. seasonally adjusted national unemployment rate ranged from 3.8 percent to 7.8 percent (U.S. Bureau of Labor Statistics). In contrast, the seasonally adjusted national unemployment rate between January 2008 and April 2009 rose by more than 3.5 percent in just over 15 months -- from 5.0 percent in January 2008 to 8.9 percent in April 2009. The role of non-financial variables in predicting retirement intentions during bad economic conditions is

currently unknown. Thus, the first goal of this study is to address this gap in our knowledge. The first wave of this study was conducted during the initial shift in the U.S. economy from a positive to a negative economic environment (March 2009), thus providing a unique opportunity for studying the impact of age and non-financial variables in a turbulent, negative economic context. The second wave of the study was conducted in July 2010. During the interval between surveys, U.S. economic conditions continued to remain relatively poor, with the national unemployment rate rising further to 9.5 percent by July, 2010. We capitalized on these downward changes in the U.S. economy in order to: (1) evaluate the generalizability of determinants previously found to predict retirement intentions during the past two decades of relative economic prosperity, (2) to investigate the effects of the worsening economy on intentions to delay retirement, and (3) to explore the nature of life and work related events that older workers have experienced during the recent economic downturn.

The effectiveness of organizational programs to retain older workers importantly depends on knowing the key factors that affect retirement intentions. Prior research provides strong evidence for the influence of age, health and retirement finances on retirement decision-making and behavior (e.g., Adams, 1999, Adams & Beehr, 1998; Adams, Prescher, Beehr, & Lepisto, 2002; Beehr, Glazer, Nielson, & Farmer, 2000; Dendinger, Adams, & Jacobson, 2005; George, Fillenbaum, & Palmore, 1984; Joulain, Mullet, Lecomte, & Prevost, 2000; Reitzes, Mutran, & Fernandez, 1998; Schmitt & McCune, 1981; Shultz, Morton, & Weckerle, 1998). Although these variables predict retirement intentions, they are often largely beyond the organization's control. As a consequence, recent research on retirement decision-making has steadily turned toward evaluating the impact of other potential influences, including work centrality (e.g., Schmidt &

Lee, 2008), job characteristics (e.g., Filer & Petri, 2008), and retirement attitudes (e.g. Mutran, Reitzes, & Fernandez, 1997). A few recent studies provide support for these additional determinants of retirement intention, over and above the predictive validities for age, health, and finances (e.g., Naude, O'Driscoll & Kalliath, 2009; Zaniboni, Sarchielli, & Fraccaroli, 2010). To date, however, no studies have examined the influence of motivational variables on retirement intentions. The lack of research on the role of individual differences in motivation in retirement intentions is surprising in light of the well-documented impact of motivation in many other aspects of work, such as job choice, job performance, and workplace behavior (see Kanfer, 2010). Thus, a second goal of this study was to examine the influence of motivational variables that might be more amenable to change by organizational interventions than factors such as age, health, or retirement finances. Specifically, we build on motivational theories of regulatory focus (Higgins, 1997), motivational traits (Kanfer & Heggstad, 2004), and motivational goal orientation (Dweck, 1986), to construct trait and state measures of work motivation for use in evaluating the role of motivational variables in predicting retirement intentions.

A third goal of this study pertains to the shifting nature of work for midlife and older workers. Prior to 2000, the majority of employed U.S. workers aged 65 and older did not work following retirement or worked part-time. During the early part of this decade, however, this pattern shifted so that today the majority of employed U.S. workers aged 65 and older work full-time (Posner, 1995). Although there is a substantial literature on retirement, research on the factors that influence post-retirement employment or final workforce withdrawal is still relatively sparse (e.g., Griffin & Hesketh, 2008, also see Shultz, 2003). In this study we use a within-person research design to examine not only the determinants of retirement intentions, but

the extent to which these factors influence intentions for post-retirement employment and final workforce withdrawal. We also examined the attractiveness of organization and job features for post-retirement employment, and the roles that attitudes toward retirement, work, the workplace, and non-work play in developing retirement intentions.

A fourth goal of this study was to provide more precise evaluation of the determinants of retirement and work intentions among midlife and older workers by sampling people who possess a similar type and level of human capital. Previous research on retirement and work intentions typically has used research designs in which the role of antecedents (such as work centrality) on intentions may be attenuated by variance associated with differences in employee education, occupation, or job context. In this study we attempt to overcome this problem by using a sample of midlife and older professionals who possess common post-secondary education and professional training in the field of engineering. Certainly these individuals have a variety of career trajectories and experiences following educational training, and are likely to be employed in jobs that vary in terms of industry sector, level, and work characteristics. Nonetheless, using a sample with similar levels of educational capital and training experiences during young adulthood provides for greater confidence in the interpretation of findings for the role of person determinants of retirement and work intentions. To permit examination of the relationship between economic conditions and retirement intentions, we employed a longitudinal research design that further allowed for assessment of retirement intentions and attitudes as a function of changing work and non-work conditions.

A fifth, related goal of this study was to evaluate potential differences in attitudes and activities between pre-retirement workers and retirees. Previous studies have mostly used

employee or retiree samples that cannot be readily compared (see Topa, Moriano, Depolo, Alcover, & Morales, 2009). The use of matched samples with respect to time/cohort and educational background allows for the assessment of how the retirement experience affects expectations, attitudes, and behavior. Findings that identify the impact of the retirement experience on determinants of retirement intentions may be ultimately used to develop more effective human resource practices for preparing workers for retirement.

In summary, this project sought to address gaps in our knowledge about the aging workforce and retirement and work intentions in two major areas, as follows:

1. Determinants of retirement and work intentions. What roles do economic, contextual (industry, job type), person (age, health, retirement finance satisfaction), motivational trait and state variables, person-job fit (work), and attitudinal variables play in predicting intentions to postpone retirement due to an economic downturn, retirement intentions, intentions to work after retirement, and intentions for when to fully withdraw from the workforce?
2. Experience-related influences on retirement and work intentions. What are the influences of work and life experiences on the stability of retirement and work intentions? What are the effects of the retirement experience on determinants of retirement and work intentions?

The findings are expected to contribute to science and practice in two ways: First, we seek to extend current knowledge by providing empirical evidence on the impact of motivational states and traits on retirement and work intentions among midlife and older workers. Second, we

explore the influence of worker and retiree experiences and their relationship to retirement intentions. These findings are expected to provide information that can be used to improve forecasting on the likelihood of retirement among members of the Baby Boom cohort, and to assist human resource managers in the development of new practices that help their employees more effectively navigate the retirement experience.

## **Method**

### ***Participants***

Participants were recruited in January 2008 from among 5,325 alumni who had obtained a bachelor's, master's, or doctoral degree between 1965 and 1990 in any engineering field from the Georgia Institute of Technology. A total of 1031 individuals (19.4%) completed the survey. Of this sample, 822 (79.7%) reported full-time employment and plans to retire from their current organization (rather than to quit their current organization and subsequently work and retire from another organization); 196 (19.01%) reported full time-retirement (engaged in no work); and 54 (5%) reported being unemployed (not retired) and looking for work.

In May 2010, approximately 16 months later, all participants from Wave 1 of the study were invited via email to participate in a follow-up study. A total of 599 participants (58.1% percent of the Wave 1 sample) completed the Wave 2 survey. Among the 599 people that comprised the final sample, 461 people reported full-time employment; 66 reported remaining full-time retired; and 22 reported remaining unemployed and looking for work. Among the participants who reported full-time employment for both waves of the survey, 397 reported their employment status as working in a managerial or non-managerial position in an organization and 64 reported being self-employed or employed as a Chief Executive Officer (CEO), Chief

Financial Officer (CFO) or President of their firm. The final sample size for employed respondents who completed both waves of the study was 397 employees and 64 self-employed/top management participants. The age for the final employed sample ranged from 41 to 67, with a mean age of 52.63. Eighty-seven percent of the final employed sample were male, and 88 percent were married. In the final employed sample, 43.2% held BA degrees, 48.8% held Master's degrees, and 8% held Ph.D. degrees. Ninety-three percent (N=430) of the final employed sample were Caucasian, 2.4% (11) African-American, 1.7% (8) Asian, 1.3% (6) Hispanic, and 1.1% (6) ethnicity not reported. Job tenure ranged from less than one month to 41.8 years ( $M = 14.8$ ,  $SD = 10.47$ ). Participants reported a wide variety of job titles, with the largest number of respondents (28.2%) reporting jobs the manufacturing and goods producing (excluding agriculture and services) sectors, followed by (13.4%) the professional and business services sectors, (12.2%) public administration, (10.7 %) the trade, transportation, or utilities sectors, (7.8%) educational or health services, (6.9%) the information sector, (5.0%) the financial sector, and fewer than 3% in leisure, hospitality, or other industry sectors. One-way ANOVAs between employed respondents who participated in the first wave of the project and respondents in the final sample showed no significant differences between the groups for age, gender, education, marital status, or job tenure.

### Measures

Participants completed a battery of background, demographic, trait, attitudinal, motivational state, and retirement and work intention measures. Descriptive statistics for the final employed sample, including internal-consistency reliability coefficients for all measures, are presented in Table 1. Composite measures are described briefly below. Unless otherwise



indicated, all items on psychological measures were assessed using six-point Likert-type scales, ranging from “strongly disagree” (1) to “strongly agree” (6), with scale scores representing the sum of item scores.

*Industry Sector.* Participants were asked to indicate which of 19 industry sector categories used by the U.S. Department of Labor best described the sector in which they were employed. For analyses purposes, industry sectors were subsequently aggregated into nine industry groups: (1) Mining, agriculture, forestry, fishing, or hunting, leisure and hospitality; (2) Manufacturing, goods-production (excluding agriculture), and construction; (3) Utilities, transportation, wholesale trade, and retail trade; (4) Educational services, health care and social assistance; (5) Professional and business services, service-providing; (6) Federal, state, and local government; (7) Information; (8) Financial; and (9) Other.

*Job Type.* Participants were asked to report their current job title (retirees were asked to report the title of the job they held at the time of retirement). Job titles were subsequently classified into one of two categories: (1) Managerial or non-managerial employee or (2) Self-employed, Chief Executive Officer (CEO), President, or Chief Financial Officer (CFO).

*Health.* General physical health was measured using two items taken from Adams’ (1999) longer health measure: “Generally speaking, my health is very good,” and “Overall, I am very satisfied with my health.”

*Retirement Finances.* Satisfaction with expected retirement income was assessed using two items adapted from the five-item measure developed by Adams (1999); namely, “I worry about whether my family income will be adequate when I retire (reverse-scored),” and “I am satisfied with what my standard of living will be when I retire.”

*Work Motivation States.* Two measures were developed to assess work motivation states experienced as a direct consequence of the economic downturn. Building on an integration of Higgins' Regulatory Focus Theory (1997), Kanfer and Heggstad's (1997) conception of motivational traits, and Dweck's (1986) distinction between learning/mastery goal orientation and performance goal orientation, one work motivation state measure was designed to assess intensity of work motivation directed toward demonstrating accomplishments and enhancing work competencies. Higgins (1997) refers to this motivational orientation as promotion focused; Kanfer and Heggstad (1997) refer to this motivational orientation as achievement, and Dweck (1986) refers to the construct as mastery goal orientation. For present purposes, we use the term *promotion-focused* describe the direction and content of this motivational orientation. A second measure of work motivation state was developed to assess level of work motivation directed toward prevention or avoidance of negative outcomes and loss. Consistent with Higgins (1997) we refer to this work motivation state as *prevention-focused*. Participants were provided with a common item stem ("Indicate below how the economic events of the past year have affected you." "Over the past year, the economic downturn has..."). The four items that comprised the promotion-focused work motivation scale and the three items that comprised the prevention-focused work motivation scale were administered to participants following the stem in random order. Examples of items on the promotion-focused work motivation scale include "motivated me to learn valuable job skills" and "motivated me to choose assignments/projects that demonstrate my abilities." Examples of items from the prevention-focused work motivation scale include "increased my concern about losing my job" and "put more pressure on me to keep my job."

*Work Centrality.* Three items from Paullay, Alliger, and Stone-Romero (1994) and two items from the Kanungo (1982) Job Involvement Scale were modified to form the Work Centrality measure. Sample items include “The most rewarding things that happen to me involve my work” and “Work is one of the most important aspects of a person’s life.”

*Motivational Traits.* Two measures were developed to assess stable individual differences in motivational traits in the work domain. Using the same integrative theoretical framework as used for developing the motivation state measures, one trait measure was designed to assess individual differences in motivational trait tendencies at work related to accomplishment and mastery (achievement motivation). A second trait measure was developed to assess trait tendencies at work directed toward avoidance of negative outcomes (avoidance motivation). In contrast to state work motivation scales that refer to specific work behaviors, the trait motivation scales reflect individual differences in broad dispositional tendencies and action preferences in the work context. Sample items from the three-item, achievement motivation trait scale are “I like to take on tasks that offer the opportunity for advancement” and “My greatest work motivation comes from the chance to learn, achieve, or challenge myself.” Example items from the four-item, avoidance motivation trait scale are “I am always mindful of how my performance will affect my job security” and “My number one concern at work is to avoid making a mistake or getting a poor performance evaluation.”

*Person-Job Fit.* Three measures of perceived person-job (P-J) fit were developed using four items adapted from Abdel-Halim’s (1981) five item measure of person-job fit and four locally developed items. Each measure of P-J Fit was designed to assess different aspects of perceived fit between the participant’s knowledge, skills, and abilities and the demands of the

job: namely, Underload, Overload, and Fit. The three-item P-J Fit - Underload measure was designed to evaluate the extent to which the participant perceived that his/her competencies exceeded the demands of the job. An example item from this scale is “I easily handle all the demands of my job.” The three-item P-J Fit -Overload measure was designed to assess the extent to which the participant perceived that the demands of the job were greater than current competencies. An example item from this scale is “My job is demanding and can be fatiguing at times.” P-J Fit, or perceived correspondence or fit between job demands and competencies was assessed using a five-item scale. An example item from this scale is “I feel that my job uses my full abilities.”

*Needs-Supplies Fit.* Needs-Supplies Fit was assessed using a modified version of the 16-item Meaning of Work Scale (MWS) developed by Mor-Barak (1995). Two items were written to assess each of four types of work incentives: social contact, personal/intrinsic, financial, and generativity (8 items total). Results of polychoric correlational analysis and structural equation modeling of the 8-item needs-supplies fit measure suggested a unidimensional measure. For each item, participants indicated the extent to which his/her current job offered as much of a benefit as desired. Sample items for each scale are “My job gives me as much respect and esteem from other people as I would like” (social contact), “My job helps me to feel as worthwhile as I would like to feel” (personal/intrinsic), “My job pays me as much as I would like” (financial), and “My job gives me as many opportunities to share my skills with younger people as I would like” (generativity).

*Co-Worker and Supervisor Relations.* Relationship with co-workers was assessed using five modified activity items from Henderson and Argyle (1985) and one locally developed item.

Example items include “I consider many of the people I work with to be my friends,” and “I have meals, coffee, or drinks with my coworkers.” Supervisor relations were assessed with two items adapted from the Eisenberger, Huntington, Hutchison, & Sowa (1986) Survey of Perceived Organizational Support; “My supervisor is glad to have me on his/her team” and “My supervisor values my contributions.”

*Knowledge Sharing.* Knowledge sharing with coworkers was assessed using six, locally developed items. Sample items include “My team/unit values knowledge sharing” and “In my unit/team, people are encouraged to give different points of view on a problem.”

*Retirement Planning-Related Measures.* Retirement goal clarity was assessed with four items containing four modified items from the Stawski, Hershey, and Jacobs-Law (2007) five-item General Retirement Goal Clarity Scale. Sample items on this scale include “I have set specific goals for how much money I will need before I can retire,” and “I am having difficulty figuring out what my financial goals should be for retirement” (reverse scored). Retirement planning intensity was assessed with eight items, including three items modified from the Stawski et al. (2007) nine-item Financial Planning Activity Scale and five locally developed items. Sample items for this scale include “read about investing or financial planning,” and “used a retirement calculator to determine how much I need to retire.” Retirement advice-seeking was assessed with four locally developed items. Sample items include “talked with current retirees about how to prepare for retirement,” and “talked with an insurance agent or benefits specialist about health insurance or other insurance I might need in late life.”

*Retirement Attitudes.* Intensity of positive retirement attitude was assessed with nine items adapted from the Brougham and Walsh (2007) 29-item list of retirement goals. Intensity

of negative retirement attitudes was assessed with 1 item adapted from Brougham and Walsh (2007) and nine locally developed items. The following common stem was used to anchor both positive retirement and negative retirement attitude items: “People differ in how they view retirement. Regardless of when you plan to retire, indicate the extent to which you agree with each statement. For me, retirement means:” Positive and negative retirement attitude items were administered to participants in random order. Examples of positive retirement attitude items include “having more freedom to do what I want,” and “a chance to do different, more interesting work.” Examples of negative retirement attitude items include “having fewer opportunities to see other people” and “being bored and not having anything to do.”

Two measures were also developed and administered to assess the importance of retirement “push” and “pull” factors for retirement decision-making (Taylor & Shore, 1995; Shultz, Morton, & Weckerle, 1998). Three items from the Shultz et al. (1998) list of pull factors were adapted to assess positively-toned beliefs that encourage or pull the individual toward retirement. Example items from this measure are “the opportunity to experience new things” and “spouse retired.” Four items from the Shultz et al (1998) list of push factors were adapted to assess negatively-toned beliefs that encourage or push the individual toward retirement. Examples of items from this measure are “feeling bored and/or tired of the work” and “feeling less competent than younger co-workers.”

*Intention to postpone retirement.* Intention to postpone retirement was assessed with two items: “Over the past year, the economic downturn has caused me to postpone my retirement” and “Over the past year, the economic downturn has caused me to postpone my plans to leave this organization.”

*Retirement Intentions.* Participants were asked to report their expected retirement age prior to December 2007 (i.e., “Before December 2007 (when the economic downturn began), at what age did you expect to retire?”), their current expected retirement age in March, 2009 (i.e., “All things considered, at what age do you expect to retire?”), the earliest age at which they expected they could afford to retire in March, 2009 (i.e., “Given the recent economic downturn, what is the earliest age at which you think you can afford to retire?”), their current expected retirement age in July, 2010 (i.e., “All things considered, at what age do you currently expect to retire from your current role?”), and the age at which they intended (in July 2010) to stop working completely (i.e., “At what age do you plan to stop working altogether?”). Each retirement intention variable was operationalized as the number of years to the intention by calculating the difference of the participant’s intended retirement or workforce withdrawal age and reported current age.

### **Procedure**

Potential participants were recruited via email invitation to participate in a survey on work and retirement. Using SurveyMonkey.com, participants were directed to a survey link. In exchange for their time, participants who completed the Wave 1 survey were entered into a random lottery drawing to win one of ten, \$50 cash prizes. The same procedure was used to recruit participants from Wave 1 to participate in Wave 2 of the study. To bolster participation in Wave 2, however, participants were offered direct compensation of \$25 for completion of the Wave 2 survey. Participants were thanked after each survey wave and offered the opportunity to receive a summary of study findings.

### **Results**

### Employed Participants

As shown in Table 1, the mean age of the employed sample was 52.63 years, with an average of 14.43 years of job tenure. Participants reported their health as very good ( $M= 9.90$ ) and reported mild satisfaction with retirement finances ( $M= 7.76$ ). As expected, results of a 3 (pre-2007 intention vs. 2009 intention vs. 2010 intention) X 6 (chronological age band; i.e., < 44 years, 45-49 years, 50-54 years, 55-59 years, 60-64 years, and > 65 years) repeated measures ANOVA on retirement age revealed significant main effects for intention ( $F(2,444)= 10.43, p < .001$ ) and age band ( $F(5,444)= 7.98, p < .001$ ), but no significant intention X age band interaction. Overall mean intended retirement age increased from 63.01 years prior to the economic downturn, to 64.40 years in 2009, and 64.21 in 2010. Intended retirement age also increased by age groups, with a mean of 60.28 for participants under the age of 45 to 67.44 for participants age 65 and older. Significant differences between chronological age bands were also observed for satisfaction with retirement finances ( $F(5,438)= 2.62, p < .05$ ), work centrality ( $F(5,440) = 8.58, p < .001$ ), achievement motivation ( $F(5,443)= 3.40, p < .05$ ), P-J Fit - Underload ( $F(5,447)= 2.36, p < .05$ ), knowledge sharing ( $F(5,441)= 2.42 p < .05$ ), perceived norm retirement age ( $F(5,377)= 6.28, p < .001$ ), and perceived co-worker retirement norm age ( $F(5,356)= 2.51, p < .001$ ). Midlife participants reported greater satisfaction with retirement finances, lower levels of work centrality, higher levels of avoidance motivation, higher P-J Fit - Underload, and a lower retirement age norm and lower perceived co-worker retirement age norm than older participants. No significant differences between age groups were observed for employment by industry sector, reported health, promotion- or prevention-focused work motivation, achievement motivation, P-J Fit, P-J Fit Overload, Needs-Supplies Fit, relationships



with co-workers or supervisors, or positive and negative retirement attitudes. Midlife participants, however, reported significantly higher levels of importance for both push and pull factors in retirement decision-making than older participants.

*Employees vs. Self-Employed/Top Management.* Results of one-way ANOVAs conducted for predictor and criterion measures by job type are displayed in Table 2. No significant differences were obtained between participant job types (employees vs. self-employed/top management respondents) for gender, health, marital status, the negative impact of the economic downturn, promotion-focused work motivation, achievement motivation, P-J Fit-Underload, P-J Fit-Overload, or Needs-Supplies Fit. Employees were significantly younger ( $M=52.39$ ) than the self-employed/top management group ( $M=54.11$ ), but reported longer job tenure ( $M=15.28$ ) than the self-employed/top management group ( $M=12.1$ ). Employees also reported significantly lower levels of work centrality ( $M=15.87$ ) than self-employed/top management respondents ( $M=18.12$ ), and significantly higher levels of prevention-focused work motivation ( $M=10.49$ ) and avoidance motivation ( $M=12.47$ ) than self-employed/top management respondents ( $M_{\text{prevention-focused}} = 8.6$ ;  $M_{\text{avoidance mot}} = 9.77$ ). Self-employed/top management respondents also reported significantly higher levels of P-J Fit ( $M=24.61$ ) than employee respondents ( $M=23.18$ ).

Significant differences were also obtained between self-employed/top management and employee respondents on retirement-related variables. Self-employed/top management respondents reported a significantly lower positive attitude toward retirement ( $M=37.02$ ), and a lower level of importance for Retirement Pull factors ( $M=13.64$ ) and Retirement Push factors ( $M=34.14$ ) than employees ( $M_{\text{posatt}} = 39.46$ ;  $M_{\text{retpull}} = 16.47$ ;  $M_{\text{ret push}} = 39.64$ ). Self-

employed/top management respondents also reported significantly higher levels of retirement-related advice seeking ( $M= 9.09$ ) than employees ( $M= 7.54$ ), but no significant differences between the groups were observed for the intensity of retirement planning activities, retirement goal clarity, or retirement financial planning activities. Self-employed/top management respondents also reported significantly more years before expected retirement ( $M= 13.84$ ) than employees ( $M= 11.18$ ).

*Post-Retirement Work Intentions.* No significant differences were obtained between job type (employees vs. self-employed/top management participants) or by age band on intention to work post-retirement. Among the employees, 67.3% ( $N= 264$ ) reported they intended to work after retirement; 62.3% (38) in the self-employed/top management sample reported an intention to work after retirement. Employees who planned to work post-retirement reported wanting to work a median of 20 hours per week, with a mean of 22.34 hours per week and a range of 1 to 60 hours per week. Employees who reported intentions to work post-retirement were also asked to rate expectations for their post-retirement job (compared to their current job) on five dimensions using a three point scale ranging from (1) less than my current job, (2) about the same as my current job, to (3) more than my current job. Among employees who intended to work post-retirement, 94.3% ( $N= 247$ ) reported that they expected the post-retirement job to involve fewer hours per week than their current job; to be less demanding than their current job (80.2%,  $N= 210$ ), and to offer less opportunity for further training than their current job (57.1%,  $N= 149$ ). However, 59.9% ( $N= 157$ ) reported that they expected their post-retirement job to be about as challenging as their current job and 48% ( $N= 221$ ) reported that they expected their post-retirement job to offer as much or more opportunities for mentoring younger workers.

Employees who intended post-retirement employment were also asked to rate the attractiveness of different work conditions in their consideration of post-retirement work using a four-point scale ranging from (1) Not at all important to (4) Very Important. Employees in this subsample rated flexible work schedule as most important (M= 3.56), followed by flexible number of hours per week (M= 3.39), flexible work location, telework, or work from home (M= 3.26), flexible work duties (M= 3.02), self-employment or performing contract work (M= 2.80), provision of health care benefits (M= 2.80), working in the same industry or occupation as previously worked (M= 2.59). Employees rated on-call work (M= 2.15) and skill training opportunities (M= 1.83) as least important for post-retirement work.

*Work and non-work experiences during the economic downturn.* Table 3 provides frequency statistics on the occurrence of life events and work events reported by employees and self-employed/top management participants during 2009-2010. Among all employed respondents, 70.9% (327) reported no significant family life events, 93.7% (432) reported no significant self-related life events, and 84.6% (390) reported no significant financial life-events over the 16 month period. However, examination of work-related events during the same period by job type shows a substantially higher frequency of work-related events. As shown in Table 3, over one-third of the employee sample (37.3%) reported receiving additional work responsibilities, 26.7% reported a change in their work role, 21.7% reported an increase in work hours, and 21.4% reported participating in a training program. In addition, 20.7% reported receiving a promotion, and 27.7% indicated they had a new supervisor. Among self-employed/top management participants, 25% reported laying off workers, 34.4% reported making a change in their business plan, and 48.4% reported losing significant revenue in their

business. Twenty-two percent of the self-employed/top management participants also reported an increase in their work hours, though 21.9% also reported a decrease in their work hours and 23.4% reported expanding their business. This pattern of results indicates that this sample of employed workers experienced a relatively high level of change in the work life of mid- and late-life workers during 2009-2010.

### Retirees

Table 4 provides descriptive statistics, including means and standard deviations, for variables assessed in the retiree sample in the first wave of the study. As indicated in Table 4, approximately half the retirees were employed post-retirement in either part-time or full-time jobs (N= 99). Table 5 displays the frequency of post-retirement work characteristics reported by part-time and full-time employed retirees.

Chi square analyses conducted on demographic and trait variables by retiree work status indicated significant differences between working and non-working retiree groups on gender ( $\chi^2(2,180) = 7.1, p < .05$ ), with a higher proportion of males in the employed category. Retiree groups also significantly differed by self-reported financial situation ( $\chi^2(2,190) = 90.4, p < .001$ ) and impact of the economic downturn ( $\chi^2(2, 190) = 38.97, p < .001$ ). Retirees who were not employed reported significantly greater dependence on retirement savings and pensions than either the job seeking or employed retiree groups. However, non-working retirees (M= 9.2) and employed retirees (M= 10.6) reported significantly less negative impact of the economic downturn than did retirees currently searching for work (M= 19.6). Employed retirees reported significant higher dependence on earned income than either the job seeking or non-working retirees. Results of one-way ANOVAs showed a significant main effect for post-retirement

employment category on age ( $F(2,184)= 6.34, p < .01$ ) and achievement motivation ( $F(2,185)= 3.01, p = .05$ ). Non-employed retirees were significantly older than employed retirees. Retirees seeking employment ( $M= 16.00$ ) were significantly higher in achievement motivation than employed ( $M= 14.70$ ) retirees. No significant differences were observed between retiree groups on avoidance motivation, demographic variables (i.e., education level, marital status, health, health at the time of retirement), work centrality, perceptions of P-J Fit, or Needs-Supplies Fit for the job held prior to retirement. Overall, retirees reported that their retirement experience was somewhat better than expected, with no significant differences between retirees by work status obtained for this judgment.

Among retirees who reported part-time or full-time employment, retirees rated their current job (compared to the job held at retirement) on six dimensions using a six-point Likert scale ranging from (1) Very untrue to (6) Very true. Working retirees ( $N= 98$ ) rated their current job as less stressful ( $M= 4.46$ ), more enjoyable ( $M= 4.38$ ), less prestigious ( $M= 4.13$ ), better suited to their skills and knowledge ( $M= 4.08$ ), more satisfying ( $M= 3.68$ ), and somewhat less demanding ( $M= 3.61$ ) than the job they held prior to retirement.

Retiree work status groups also differed significantly on several retirement-related variables. One way ANOVAs by retiree work status showed significant differences for intensity of retirement planning activities prior to retirement ( $F(2,181)= 5.02, p < .01$ ), retirement goal clarity ( $F(2,183)= 3.88, p < .05$ ), anticipated retirement financial needs ( $F(2,183)= 10.77, p < .001$ ), intensity of current positive attitude toward retirement ( $F(2,181) = 6.2, p < .01$ ), and the perceived importance of factors that had pushed the individual toward retirement ( $F(2,178) = 3.69, p < .05$ ). Retirees seeking employment reported more pre-retirement planning activity ( $M=$

31.1) than working retirees ( $M = 26.0$ ), a higher level of goal clarity prior to retirement than working retirees ( $M_{\text{seeking}} = 15.2$ ;  $M_{\text{employed}} = 12.4$ ), and a higher level of anticipated financial savings satisfaction than non-working retirees ( $M_{\text{seeking}} = 7.7$ ;  $M_{\text{not working}} = 4.5$ ). Employed retirees reported a significantly less positive attitude toward retirement currently than non-working and job-seeking retirees ( $M_{\text{employed}} = 33.1$ ;  $M_{\text{not working+seeking}} = 36.4$ ). Employed retirees also reported significantly greater importance of factors that had pushed the individual toward retirement than non-working or job-seeking retirees ( $M_{\text{employed}} = 10.57$ ,  $M_{\text{non-working + seeking}} = 9.1$ ). No significant differences were obtained between the retiree work status groups on the intensity of retirement advice seeking reported to have occurred prior to retirement, intensity of current negative attitude toward retirement, or the importance of factors that had increased their attraction to retirement (pull factors).

#### Retirement Intentions among Employed Participants

*Pre-2007 Retirement Intention.* The mean intended retirement age prior to the economic downturn reported by all employed respondents ranged from 45 to 82 years of age ( $M = 63.01$ ,  $SD = 5.92$ ). Overall, participants expected to work an additional 10.39 years ( $SD = 7.3$ ) before retirement. However, results of an ANOVA by industry sector showed a significant difference in expected years to retirement by industry sector ( $F(8,438) = 6.51$ ,  $p < .001$ ), with the mean intended retirement age ranging from 60.90 for employees in the utilities, transportation, wholesale trade, and retail trade sector to 68.77 in the financial sector. Mean pre-2007 intended retirement age was 62.54 in the most populous manufacturing, goods-production (excluding agriculture), and construction sector. A  $2 \times 8$  repeated measure analysis of variance between respondent pre-downturn expectations and current expectations for the earliest time at which

they could afford to retire by industry showed a consistent significant main effect for industry and a significant interaction between industry and length of work expectations ( $F(8,430)= 2.35, p < .05$ ).

*Economic Downturn Impact on Intention to Postpone Retirement.* At total of 39.8 percent (179) workers reported a delay in the age at which they intended to retire as a result of the economic downturn, with a mean expected retirement delay of 1.51 years. Figure 1 displays the reported length of retirement delay intended as a consequence of the economic downturn by age groups, though no significant differences between age groups were found for length of retirement delay ( $\chi^2 (5,456)= 4.99, p = .42$ ). Results of one-way ANOVAs by delay status (e.g., Delayers vs. Non-Delayers) indicated that that Delayers had pre-2007 intentions to retire significantly earlier than those who did not plan to delay their retirement. Delayers also reported significantly lower levels of health, achievement motivation, P-J Fit, Needs-Supplies Fit, work centrality, and post-retirement work intention than Non-Delayers. Delayers reported significantly higher levels of prevention-focused work motivation, promotion-focused work motivation, avoidance motivation, retirement planning intensity, and stronger positive retirement attitude and retirement pull factors.

Results of hierarchical regression analyses to evaluate the relative contribution of determinants to the prediction of the intention to postpone retirement are presented in Table 6. As shown in the table, context variables (industry sector and job type) did not provide significant predictive validity for delay intentions. However, as suggested from the results presented above, every remaining class of determinants made a significant, incremental contribution to the prediction of the delay intention.

Retirement Intentions. Table 7 presents the results of hierarchical regression analyses conducted on retirement intentions reported in 2009 and 2010, as well as 2009 perceptions of the earliest age at which participants believed they could afford to retire. As shown in Table 7, the predictive validities of the determinant classes on years to intended retirement remained relatively stable across 2009 and 2010. Examination within variable classes showed that both industry sector and job type significantly predicted years to intended retirement in both 2009 and 2010. Participants in the mining, agriculture, forestry, fishing, or hunting industry sectors reported the fewest years to intended retirement ( $M_{2009} = 5.58$  yrs;  $M_{2010} = 6.58$  yrs), followed by participants working in federal, state or local government positions ( $M_{2009} = 9.71$  yrs;  $M_{2010} = 9.40$  yrs). Participants working in the manufacturing, good-production and construction sector, the utilities, transportation, wholesale trade, and retail trade sector, the educational services, health care, and social assistance sector, the professional and business services, service-producing sector, and the information sector reported similar years to intended retirement in 2009 and 2010, ranging from 11.14 years to 12.85 years. Participants working in the financial and other sectors reported substantially longer time until intended retirement for both 2009 and 2010, ranging from 15.08 years to 10.22 years. As shown in Table 2, employees reported significantly fewer years until intended retirement than self-employed/top management participants in both 2009 and 2010.

As expected, traditional person variables also contributed significant incremental validity, beyond that of context variables for retirement intentions in 2009 and 2010. Age exerted significant negative predictive validity on retirement intentions, with older participants reporting fewer years to intended retirement. Individual differences in motivational traits also exerted



significant predictive validities on years to intended retirement, with participants high on achievement motivation reporting significantly more years to intended retirement in both 2009 and 2010. Work centrality and avoidance motivation also exerted significant, incremental influence on retirement intentions in 2010, with participants higher in work centrality and lower in avoidance motivation reporting fewer years to intended retirement. Finally, retirement attitudes provided significant incremental predictive validity beyond that of context, person factors, and traits to both 2009 and 2010 retirement intentions. Participants who reported a more positive attitude toward retirement intended to retire in fewer years than participants who reported a less positive attitude toward retirement.

Results obtained on the belief about the minimum number of work years perceived to be necessary before being able to afford retirement showed significant relationships between this variable and all but person-job fit variables taken in isolation. Age and satisfaction with retirement finances were significantly negatively related to perceived affordable retirement. Older participants, those more satisfied with their retirement finances, and participants higher in work centrality reported fewer years until reaching a minimum affordable retirement age. However, participants high in achievement motivation and avoidance motivation reported more years until reaching a point of affordable retirement. Similarly, participants who were high in prevention-focused work motivation reported significantly more years until affordable retirement than participants low in prevention-focused work motivation. Examination of retirement-related attitudes indicated that individuals who rated retirement pull factors as more important in retirement decision making were significantly more likely to report more years until reaching a

point of affordable retirement than people who rated retirement pull factors less important in retirement decision-making.

Results of hierarchical regression analysis indicated that all determinants together accounted for about 55 percent of variance in beliefs about years to affordable retirement. Although similar to the percent of variance accounted for in analyses of years until expected retirement in 2009 and 2010, only person and trait variables provided significant incremental predictive validities for affordable retirement. That is, industry sector, job type, work motivation scales, P-J Fit perceptions, and retirement attitudes did not provide significant incremental predictive validities for judgments of minimum years to affordable retirement.

*Determinants of Normative Retirement Age Beliefs, Post-Retirement Work Intentions and Workforce Withdrawal Intentions.* Figure 2 displays normative retirement age beliefs, along with intended retirement age and intended workforce withdrawal age by age group. Two aspects of the figure warrant note. First, with the exception of the youngest midlife participants (under the age of 44), participants across all age groups displayed a similar gap of approximately seven years between the age they intended to retire and the age they intended to stop working altogether. Second, the relationship between intended retirement age and perceived retirement age norm changed with chronological age. Although both age norms and intentions increased with increasing age, retirement age intentions are consistently higher than perceived retirement age norms beginning with the 50-54 year old age group. This pattern suggests that there may be late, age-related changes in the view of the retirement age norm.

Table 8 summarizes regression analyses conducted on the determinants of normative age beliefs, post-retirement intentions, and workforce withdrawal intentions among employees. In contrast to the significant roles found for context, person, trait, work, and attitudinal variables in predicting retirement attention, these determinants accounted for less than 17 percent of the variance in normative retirement age beliefs and less than 14 percent of the variance in post-work retirement intentions. Results of hierarchical regression analysis for normative retirement belief indicated that context did not contribute significant predictive validity to age at which participants thought was appropriate for retirement, but that work variables (P-J Fit) did provide incremental predictive validity beyond that of other variables. Participants who reported higher levels of P-J Fit were significantly more likely to report a higher retirement age norm than participants with lower levels of P-J Fit. Older participants also reported a higher retirement age norm than midlife participants, and participants with a more positive attitude toward retirement reported a lower retirement age norm belief than participants with a less positive attitude toward retirement.

Also shown in Table 8 are findings obtained from logistic regression analysis on the intention to work post-retirement. As shown, only traits and retirement attitudes provided significant predictive validities for the intention to work post-retirement. Participants high on achievement motivation and participants reporting a less positive attitude toward retirement were more likely to report intentions to work post-retirement than participants low on achievement motivation or participants reporting a more positive attitude toward retirement.

Findings obtained in regression analyses of determinant influences on workforce withdrawal intentions indicate a pattern of results similar to that obtained for retirement

intentions. Contextual, person, and trait variables exerted significant, incremental predictive validities on the intended number of years participants intended to work prior to fully withdrawing from the workforce. However, in contrast to results obtained for 2009 and 2010 retirement intentions, retirement attitudes did not provide significant incremental predictive validity for intended years until final workforce withdrawal.

### Summary and Discussion

Workforce aging and spot shortages of new entrants into STEM occupations present difficult challenges for human resource managers in organizations that employ these professionals. For many organizations, employment patterns over the past few decades have created a precarious situation in which large numbers of employees are approaching or in their sixth decade of life and the point at which they become eligible for retirement benefits. To avoid workforce shortage, organizations need to identify the key determinants of retirement and work intentions so that they can more effectively retain midlife and older workers. Although the economic decline can be expected to attenuate retirement intentions in the short term, organizations must plan for how and who to retain when economic conditions improve.

The findings obtained in this study make two important contributions to the scientific literature and to human resource management practice. First, as expected, we observed a significant increase in intended retirement age of about one year from before the economic downturn to 2009 across all age bands. But the intention to postpone retirement due to the economic downturn was not universal, and only about 40 percent of our employed sample reported an intention to delay retirement as a consequence of the economy. Delayers were

significantly older, and reported poorer health, higher levels of prevention-focused work motivation and avoidance motivation, lower achievement motivation, lower work centrality, a more positive retirement attitude, higher levels of retirement planning activity, and less likelihood that they would seek post-retirement employment than Non-Delayers. That is, workers who intended to delay retirement due to the economic downturn were those that would be expected *most* likely to retire under better economic conditions. However, the high level of prevention-focused work motivation reported by these individuals also indicates that Delayers were very concerned with job security. As such, it appears that avoiding financial hardship was the principal work motivation of Delayers. In contrast, Non-Delayers reported high levels of promotion-focused work motivation. The low work centrality, more positive attitude to retirement and prevention-focused motivational orientation of Delayers suggests that these workers are unlikely to remain in the organization once economic conditions improve. That is, the broad negative impact of the economy on retirement intentions may be less important for making predictions about who is likely to retire as the economy improves than the individual's motivational orientation and attitudinal profile.

The second major contribution of this study pertains to the consistent empirical support obtained for the role that motivational traits play in predicting retirement intentions. Prior research on retirement has provided evidence for the role of trait correlates (such as goals and attitudes), but has not directly examined individual differences in motivational traits. This study found that motivational traits contributed significant predictive validities, beyond that of previously documented determinants such as age, retirement finance satisfaction, and work centrality for retirement intentions, post-retirement work intentions, and even final workforce

retirement intentions. Specifically, individuals high in achievement motivation were more likely to report intentions to later retirement intentions. From an organizational perspective, we propose that assessing individual differences in motivational traits among midlife and older workers is a potentially useful way to improve accuracy in the prediction of workforce retirement. Perhaps more importantly, we note that workers high in achievement motivation also reported intentions to work after retirement. If organizations fail to provide such workers with the challenging environments they prefer pre-retirement, it is quite reasonable to expect that these workers will retire earlier in order to take more attractive work elsewhere.

It is also important to note that improving work conditions (e.g., flexible scheduling) does not necessarily engage the older worker *on the job*, and so may be a less effective strategy for retaining older workers high in achievement motivation. Flexible work scheduling, for example, is likely to increase the attractiveness of staying with the organization, but less likely to have an effect on the motivational environment in which the work is performed. *Organizations that wish to retain older workers who possess high levels of achievement motivation will need to implement human resource practices that engage these workers on the job, by providing opportunities for skill utilization and intrinsic work rewards to the same extent as practices directed toward retaining younger high achievement-oriented workers.* Because there are age-sensitive differences in employee motives, knowledge, and competencies, human resource management practices for retaining older workers will need to differ in content from those used for younger workers. For example, although standardized skill-training formats often provide an excellent context for intrinsic reward satisfaction (associated with learning) among younger workers, this context is unlikely to confer the same level of intrinsic reward for older workers.

Self-paced and collaborative training environments, mentoring, and challenging task assignments that demand high levels of job knowledge and offer opportunities for skill utilization and intrinsic reward are likely to be far more effective for retaining older workers.

We also obtained two results that stand in sharp contrast to previous findings. First, contrary to expectations based on Kanfer and Ackerman (2004), we obtained little support for the notion that perceptions of P-J fit directly affect retirement or work intentions. Interestingly, however, we did find that P-J Fit provided significant incremental predictive validity for beliefs about normative retirement age. The influence of P-J Fit on normative beliefs, but not one's own retirement intention, suggests that further attention be given to understanding how midlife and older workers arrive at judgments of P-J fit and the events that may trigger a re-evaluation of P-J fit. For example, it may be that because older employees are less likely to change their employment situation due to perceived change in P-J fit than younger workers, perceptions of fit affect age-related norms, rather than serve as signals for personal action. Indirect support for this proposal is provided by the finding that retirement age norms trail retirement age intentions among older, but not midlife workers.

Surprisingly, we also obtained no support the role of health on retirement intentions. One logical explanation for these findings is that health is more important to retirement decision-making in jobs that make higher demands on physical abilities than the jobs held by most of our samples. Yet, even in our sample it seems unlikely that health plays no significant role in the formation of retirement intentions, and participants in our sample even accorded a decline in health an important consideration in the formation of a retirement decision. We suspect that our lack of evidence for the role of health on retirement intentions is due to the way that we

measured health. Although we measured health in the customary way – assessing level of general health – we note that there was relatively little variability for this measure. It may be that we did not measure the critical aspects of health; namely, a decline in health rather than general health. We suggest that future research among midlife and older workers engaged in knowledge work use health measures that assess a change or decline in health or the occurrence of health events (e.g., surgery), rather than level of general health.

Although we did not originally intend to study potential differences in the determinants of retirement intentions among employees versus self-employed and top-management older workers, the large number of self-employed and top-management participants in our sample allowed us a unique opportunity to compare these groups. Two findings in this comparison are noteworthy. First, although employees reported longer job tenure than self-employed/top management respondents, employees also reported lower levels of work centrality, higher levels of prevention-focused work motivation, avoidance motivation, and a stronger positive attitude toward retirement than self-employed/top management participants. Obviously, our study does not permit analysis of how these differences came about or the influence of the work environment on these differences. However, we think that this pattern highlights a potentially important difference in how employees and self-employed/top management in this professional sample conceptualize work and retirement. For some employees, retirement may come to represent a negative reinforcer; that is, by retiring the employee puts an end to concerns about performing well, relationship conflicts, and organizational politics. Together with the lower work centrality reported by employees compared to self-employed/top management participants, it seems reasonable to expect that employees are more likely to see retirement in a positive light



and less likely to associate retirement with a significant threat to sense of identity or a decline in self-esteem. Further evidence that employees may hold an overly positive view of retirement comes from retiree findings that show retirees reporting a lower positive attitude toward their retirement than employees reported pre-retirement. Finally, current employees who planned to work past retirement tended to hold a more positive view of future post-retirement employment than did retirees rating their current work compared to the job that they held prior to retirement. Taken together, these findings suggest that midlife and older employees may form retirement intentions based on incomplete consideration of work and non-work following retirement. Research is needed to evaluate the usefulness of programs aimed at helping employees develop a realistic picture of their post-retirement employment experience. In particular, practices that promote greater retirement advice-seeking from retirees with similar pre-retirement work experiences may be quite useful for helping employees consider the range of issues to be considered in work role transitions (such as in bridge retirement programs) and retirement decision-making.

Our findings also show a surprisingly high level of work-related events and changes for midlife and older employees during 2009-2010. Although most organizational managers are well-aware of the increasing level of non-work demands placed on older workers due to health and family issues, we are unaware of prior empirical work that systematically examines changes in work-related demands experienced by midlife and older workers who are not enrolled in bridge retirement programs. Future research is needed to determine whether the high level of work change, including new supervisors, changing work role, and more work responsibilities that were reported by employees in our sample are a consequence of the economic downturn or

represent work life in general for midlife and older workers. Although our findings are exploratory, the patterns of work activity observed in this study suggest that greater attention should be paid to understanding the effects that the frequency and type of work events experience may have on older worker attitudes and motivation.

*Limitations.* The sampling of only those individuals who possessed educational training in engineering may be considered an advantage or disadvantage of this research. The use of a sample that possess a similar level of educational capital and early professional training experiences permits a stronger evaluation of how our target factors influence retirement and work intentions. However, by limiting our assessment to this group alone, the findings may not generalize to other older workers with different levels of educational capital and work experiences. As a result, caution must be taken in generalizing the results of this study to employees with different types and levels of educational capital. A related potential limitation pertains to the fact that participants in this study were employed in or had retired from jobs that made high demands on knowledge and skills, but relatively low demands on age-sensitive physical abilities. As noted previously, this restricted range of job demands may also contribute to our finding that health did not significantly predict retirement or post-retirement work intentions.

Another limitation of this study concerns the use of a predominantly male, Caucasian sample. Although the predominance of males in our sample of older workers reasonably reflects the predominance of males in jobs that demand advanced levels of engineering education, it is unclear whether the factors that influence retirement intentions in this sample operate similarly for women and in race-diverse populations. Our data suggest that employee diversity in the

scientific and technical sectors of the workforce is currently at the lower end of midlife (all females in our sample were younger than 50 years of age), but the issue of generalizability to other segments of the aging workforce, including women and members of other race/ethnic groups is certainly an issue that will grow increasingly important over the next few decades.

A less obvious but important limitation to this and similar research on retirement intentions pertains to potential differences among individuals when reporting intentions for events that are often more than a decade in the future. Aging research suggests that age is negatively correlated with future time perspective, such that older individuals maintain a shorter time horizon for the future than younger individuals. Although we did not assess future time perspective in this study, recent findings by Zacher and Frese (2009) indicate that work characteristics moderate the age-future time perspective relationship. Research is needed to examine whether future time perspective might also exert causal influence on work motivation and retirement intentions.

#### Contributions to Practice

The aim of this study was to provide an in-depth investigation of the determinants of retirement intentions among midlife and older workers. Rather than investigating retirement intentions across a wide variety of occupations and people with different types of knowledge and skills, we chose to sample engineering alumni in order to hold the educational background and core set of knowledge, skills, and professional training experiences of our sample relatively constant. To increase our understanding of the antecedents and consequences of retirement decision-making, we collected data from engineering alumni who were currently employed and

from alumni that were retired. We further distinguished between managerial and non-managerial employees of organizations and participants who were self-employed or occupied top management positions in their firm. Within the retiree group, we examined differences between retirees who were unemployed and those that had taken part-time or full-time positions. We surveyed engineering alumni in March 2009 in order to evaluate the generalizability of known predictors of retirement intentions and the predictive validities of individual differences in motivational traits and perceptions of P-J fit in the context of a negative economic environment. In July 2010, we re-surveyed the samples to obtain data on work and retirement experiences over the previous year and to re-evaluate the determinants of retirement intentions in an improving economy.

Our findings contribute to the research literature and practice in several ways. First, we show a general increase in intended retirement age increased during the economic downturn, there were important distinctions between retirement “delayers” and “non-delayers.” We interpret these differences as suggesting that retirement delay due to the economy is motivated by concerns for preventing resource loss, and that individuals who have delayed retirement due to the economy are not likely to be retained once economic conditions improve. Second, we found that individual differences in motivational traits significantly predicted retirement intentions beyond traditional predictors of age, retirement finances satisfaction, health, and work centrality. Our findings provide initial evidence for the importance of individual differences in motivational traits for retirement decisions and indicate the need for additional research to evaluate how work environments activate these trait tendencies. We also found that midlife and older workers who reported high levels of achievement motivation were significantly more likely

to retire later in life and to work after retirement. In the poor economic environment in which this study was conducted, individuals high in achievement motivation may be those that organizations are likely to most want to retain.

Our findings also offer a number of insights into the development of more effective human resource practices to retain midlife and older workers. These findings and their implications for practice are described below.

1. *Employee orientations toward work and retirement.* Participants in our study can be broadly organized into one of two groups. Employed participants who did not intend to work post-retirement and non-working retirees both reported a strong focus on financial issues, more positive attitudes toward retirement, and higher levels of avoidance motivation. In contrast, participants who intended to work post-retirement and retirees who worked reported a weaker focus on financial issues, a less positive attitude toward retirement, and higher levels of achievement motivation. We suggest that organizational practices may exert an important influence on midlife and older worker's orientation toward retirement. Midlife and older workers with strong positive attitudes toward retirement described their primary motivational focus at work was to look good to others and to be protective with respect to financial issues and job security. For these individuals, the human resource strategies that are likely to be most successful are those that provide financial security and changes in the work roles that move the individual closer to retirement.

In contrast, for workers high in achievement motivation, retirement was less attractive. The threat to retaining these employees is most likely to spring from

employee dissatisfaction with challenges and opportunities afforded in their work roles. Because these individuals tend to also view work as a more central feature in their lives, they are also more likely to be receptive to post-retirement employment with the organization, *if the work role offered is perceived to be rewarding*.

Unfortunately, the need to support older workers with this profile may go unnoticed by the organization until late in the retirement transition process. Human resource strategies to retain this group of workers must that create environments conducive to individuals high in achievement motivation and avoid activation of prevention-focused work motivation. While work role adjustments such as mentoring, may satisfy needs for accomplishment, other strategies are needed to prevent activation of prevention-focused work motivation states. Organizational strategies are needed that communicate the value of older worker knowledge capital and skills and so reduce worker concerns about job security.

2. *Employee visions of retirement.* To date, most research on preparing employees for retirement has focused on the importance of goal clarification and employee planning with respect to evaluating financial readiness for retirement. Findings on the impact of these programs indicate a strong positive relationship between retirement planning and retirement. However, results of our study suggest that employees may hold incomplete or unrealistic expectations with respect to post-retirement work and non-work life. We suggest that organizational programs focus on helping employees develop a more comprehensive retirement plan that takes into account not only the benefits of retirement but the challenges associated with finding post-retirement

work, activities to maintain sense of identity, time management issues, and creating and managing effective professional and social networks. Two program features that may be particularly helpful in this process include providing employees with more opportunities for advice-seeking from organizational retirees, and the use of motivational interviewing methods to evaluate the adequacy of retirement plans. These strategies also present an excellent opportunity for introducing alternative solutions to retirement that retain the employee within the organization in a new capacity.

3. Build reverse socialization practices. Numerous programs exist for the purpose of facilitating the entry and socialization of new workforce entrants into the organization. At the other end of the life course, bridge retirement programs provide structural and financial pathways for the transition to retirement. However, such programs often prepare older workers for retirement rather than post-retirement employment. Our findings indicate that the majority of today's older workers do not plan to withdraw from the workforce immediately following retirement, but rather intend to work for another six to seven years following retirement. Reverse socialization programs may be useful for both organizations and employees. From an organizational perspective, these programs (sometimes called clubs) promote organizational loyalty and create new opportunities for knowledge transfer. For employees moving toward retirement, such programs can be used to help identify and develop interpersonal competencies needed to obtain work after retirement and in the post-retirement world (e.g., time management).

Table 1. Means, standard deviations, and reliabilities for variables – All employed sample.

Variable	N	Mean	SD	Number of items	Possible range	Reliability
<u>Predictor Measures</u>						
Chronological Age	461	52.63	5.88	1	41-67	-
Health	442	9.90	1.88	2	2-12	.85
Job Tenure	461	14.43	10.47	1	0-41	-
Retirement Finances	444	7.76	2.18	2	2-12	.53
Promotion-Focused Motivation	456	16.31	6.01	5	5-30	.88
Prevention-Focused Motivation	456	10.23	4.07	3	3-18	.79
Work Centrality	444	16.16	4.26	5	5-30	.67
Achievement Motivation	452	14.57	2.44	3	3-18	.67
Avoidance Motivation	449	12.11	4.26	4	4-24	.75
P-J Fit – Match	453	23.57	5.08	5	5-30	.87
P-J Fit – Underload	453	14.23	2.56	3	3-18	.71
P-J Fit – Overload	453	13.65	2.73	3	3-18	.67
Needs-Supplies Fit	442	35.43	7.37	8	8-48	.86
Co-Worker Relations <sup>a</sup>	386	32.66	4.86	7	7-42	.81
Supervisor Relations <sup>a</sup>	388	10.27	1.66	2	2-12	.90
Knowledge Sharing <sup>a</sup>	382	31.19	4.10	6	6-36	.82
Retirement Goal Clarity	444	13.91	4.15	4	4-24	.70
Retirement Planning Activities	445	23.46	7.31	8	8-48	.81
Retirement Advice Seeking	440	7.74	3.45	4	4-24	.70



Positive Retirement Attitude	431	39.23	5.55	9	9-54	.72
Negative Retirement Attitude	436	27.32	8.39	10	10-60	.83
Retirement Push Factors	434	15.62	4.84	4	4-24	.86
Retirement Pull Factors	432	10.89	3.13	3	3-18	.67
Perceived Retirement Norm Age	383	63.56	4.07	1	50-81	-
Perceived Co-Wrkr Ret. Norm Age	362	63.54	4.06	1	50-81	-
<u>Criteria Measures</u>						
Pre-2007 Retirement Intention Age	456	63.01	5.92	1	45-82	-
Pre-2007 Years to Intended Ret.	456	10.39	7.26	1	0-36	-
Intention to Postpone Ret. – 2009	456	5.63	2.87	4	4-12	.76
2009 Retirement Intention Age	460	64.40	5.56	1	50-82	-
2009 Years to Intended Retirement	460	11.78	7.09	1	0-36	-
2009 Affordable Ret. Age Min	456	63.51	5.45	1	50-82	-
2009 Years to Afford Ret. Age Min	456	10.91	7.07	1	0-35	-
2010 Retirement Intention Age	455	64.21	5.36	1	46-81	-
2010 Years to Intended Retirement	455	11.55	6.59	1	0-32	-
2010 Post-Ret. Work Hrs Intention <sup>a</sup>	252	22.33	7.27	1		-
2010 Final Withdrawal Int. Age <sup>b</sup>	374	69.47	6.30	1		-
2010 Workforce Withdrawal Int. <sup>b</sup>	374	17.03	7.91	1	0-41	-

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<sup>a</sup> Employees who reported intention to work after retirement only (N=252). <sup>b</sup> Employees only (N=374).

Table 2. Results of One-Way ANOVAs for Predictor and Criterion Measures by Job Type (Employees vs. Self-Employed/Top Management).

Variable	F	<i>df</i>	<i>p</i>
<u>Predictors</u>			
Age	4.30	1, 459	.03*
Health	1.71	1, 440	.19
Retirement Finances	1.89	1, 442	.17
Job Tenure (months)	5.15	1, 459	.02*
Promotion-Focused Motivation	.54	1, 454	.46
Prevention-Focused Motivation	11.87	1, 454	.00**
Work Centrality	14.58	1, 444	.00**
Achievement Motivation	.00	1, 407	.99
Avoidance Motivation	22.30	1, 447	.00**
P-J Fit –Match	4.23	1, 451	.04*
P-J Fit – Underload	.14	1, 451	.71
P-J Fit - Overload	.05	1, 451	.82
Needs-Supplies Fit	.08	1, 447	.78
Retirement Planning Intensity	.00	1, 443	.96
Retirement Advice Seeking	10.35	1, 438	.00**
Importance of Retirement Push Factors	14.23	1, 432	.00**
Importance of Retirement Pull Factors	27.59	1, 430	.00**
<u>Criteria</u>			
Years to Retirement Before 2007	4.57	1, 454	.03*
Years to Afford Retirement	.01	1, 454	.90
Postpone Retirement	.01	1, 454	.92

Years to Retirement 2009	7.90	1,458	.01*
Years to Retirement 2010	8.98	1,453	.00**

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Table 3. Frequency of Employed Sample Reported Work and Life Experiences 2009-2010 by Job Type.

Experience	Percent Employee Sample	Percent of Self-Employed/Top Management Sample
<u>Life/Family Events</u>		
Family/friend died	16.6% (66)	23.4% (15)
Change in family member health	11.6% (46)	10.9% (7)
Change in health work unaffected	6.0% (24)	0.0%
New caregiver responsibilities	5.3% (21)	9.4% (6)
Change in family status	2.8% (11)	4.7% (3)
Spouse lost job	3.5% (14)	3.1% (2)
Divorced	2.5% (10)	3.1% (2)
Spouse retired	2.0% (8)	1.6% (1)
Change in health affected work	1.3% (5)	1.6% (1)
Spouse died	.5% (2)	0.0%
<u>Work Events</u>		
More work responsibilities	37.3% (148)	14.1% (9)
New supervisor	27.7% (110)	-
Change in work role with same org.	26.7% (106)	-
Increased work hours	21.7% (86)	21.9% (14)
Participated in training	21.4% (85)	-
Promoted	20.7% (82)	-
Personal finances deteriorated	16.6% (66)	40.6% (26)

Decreased job security	15.9%	(63)	-
Furloughed	8.0%	(33)	-
New job in new organization	4.8%	(20)	-
Took additional PT job	1.5%	(6)	-
Bridge job at same organization	.5%	(2)	-
Lost significant revenue	-		48.4% (31)
Changed business plan	-		34.4% (22)
Laid off workers	-		25.0% (16)
Expand business	-		23.4% (15)
Reduced workload	-		12.5% (8)
New business partner	-		6.3% (4)
Change in management	-		4.7% (3)
Moved business	-		4.7% (3)
Sold/closed business	-		3.2% (2)

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Note. Employee, N = 413. Self-employed/Top Management, N= 64. Number of participants in parentheses. Items not assessed in each sample indicated by a dash (-).

Table 4. Means, standard deviations, and reliabilities for variables - Retiree Sample.

Variable	N	Mean	SD	Number of items	Possible range
Chronological Age	190	59.42	5.67	1	43-66
Years Retired	190	6.63	6.24	1	0-39
Health at Retirement	190	9.90	1.88	2	2-12
Finances at Retirement	184	6.30	1.27	2	2-12
Years Job Tenure at Retirement	190	22.96	9.88	1	2-43
Work Centrality	182	15.30	4.00	5	5-30
Achievement Motivation	189	15.12	2.64	3	3-18
Avoidance Motivation	184	12.11	4.26	4	4-24
P-J Fit – Match	188	24.26	4.85	5	5-30
P-J Fit – Underload	188	15.17	2.45	3	3-18
P-J Fit – Overload	188	13.38	2.96	3	3-18
Needs-Supplies Fit	187	38.71	7.39	8	8-48
Co-Worker Relations	186	35.09	4.93	7	7-42
Supervisor Relations	185	10.23	2.08	2	2-12
Knowledge Sharing	188	31.45	4.18	6	6-36
Retirement Goal Clarity	184	15.60	4.90	4	4-24
Retirement Planning Activities	182	28.02	9.26	8	8-48
Retirement Advice Seeking	184	10.80	4.78	4	4-24
Positive Retirement Attitude	182	34.74	6.68	9	9-54
Negative Retirement Attitude	183	24.65	6.18	9	9-54
Retirement Push Factors	180	9.51	5.11	4	4-24

Retirement Pull Factors	179	6.56	3.50	3	3-18
2009 Econ Press to Work	191	5.40	3.63	3	3-18
2009 Econ Press to Learn New Skills	191	1.91	1.26	1	1-6
Overall Retirement Experience	181	2.30	.97	1	1-6

Retirees Working Comparison of  
Current to Past Job

More Enjoyable	97	4.38	1.29	1	1-6
Less Demanding	98	4.11	1.71	1	1-6
Better suited to Skills & Knowledge	98	3.63	1.40	1	1-6
More Satisfying	98	4.08	1.31	1	1-6
Less Prestigious	98	3.66	1.59	1	1-6
Less Stressful	98	4.55	1.52	1	1-6

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Table 5. Frequency of Post-Retirement Work Characteristics by Full-Time vs. Part-Time Retiree Employment.

Characteristic	# Part-Time	# Full-Time
Flexible Schedule	31	28
Flexible #Hrs/Week	28	11
Skill Training Provided	2	11
Job in a Company	14	43
Self-Employed or Contract Work	20	12
On-Call Work	4	1
Health Care Benefits Provided	2	34
Flexible Work Duties	9	7
Flexible Work Location	18	14
In Same Industry	19	34

Note. Part-Time Retirees, N = 37. Full-Time Retirees, N = 62.



Table 6. Summary of Multiple Correlations for Predicting Intention to Postpone Retirement.

Predictor	Step 1 Context	Step 2 Person	Step 3 Past Yrs to Ret.	Step 4 States	Step 5 Ret. Planning	Step 6 Traits
R <sup>2</sup> in isolation	.000	.130**	.121**	.236**	.049**	.093**
R <sup>2</sup> to add	.000	.130**	.102**	.144**	.012**	.014**
Total R <sup>2</sup>	.000	.130**	.232**	.376**	.388**	.402**

Note: N= 422. Step 3 is one degree of freedom in the numerator. Steps 1, 2, and 4 are two degrees of freedom each in the numerator; Step 5 and 6 are three degrees of freedom each in the numerator.

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

Table 7. Summary of Multiple Correlations for Predicting Years to Retirement Intentions.

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Predictor	Context	Person	Traits	State	Work	Ret.Att
<b>Ret. Intention 2009</b>						
R <sup>2</sup> in isolation	.028**	.433**	.038**	.011	.003	.034**
R <sup>2</sup> to add	.028**	.451**	.024**	.001	.006	.027**
Total R <sup>2</sup>	.028**	.479**	.503**	.504**	.510**	.537**
<b>Ret. Intention 2010</b>						
R <sup>2</sup> in isolation	.029**	.422**	.038**	.014	.008	.027**
R <sup>2</sup> to add	.029**	.441**	.015**	.000	.008	.022**
Total R <sup>2</sup>	.029**	.471**	.486**	.486**	.494**	.515**
<b>Min. Afford. Ret. 2009</b>						
R <sup>2</sup> in isolation	.005	.515**	.096**	.044**	.019	.050**
R <sup>2</sup> to add	.005	.519**	.016**	.001	.005	.005
Total R <sup>2</sup>	.005	.524**	.539**	.540**	.545**	.550**

Note: N= 414. Steps 1 and 4 are two degrees of freedom each in the numerator; Step 2 and 3 are three degrees of freedom, Steps 5 and 6 are four degrees of freedom.

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

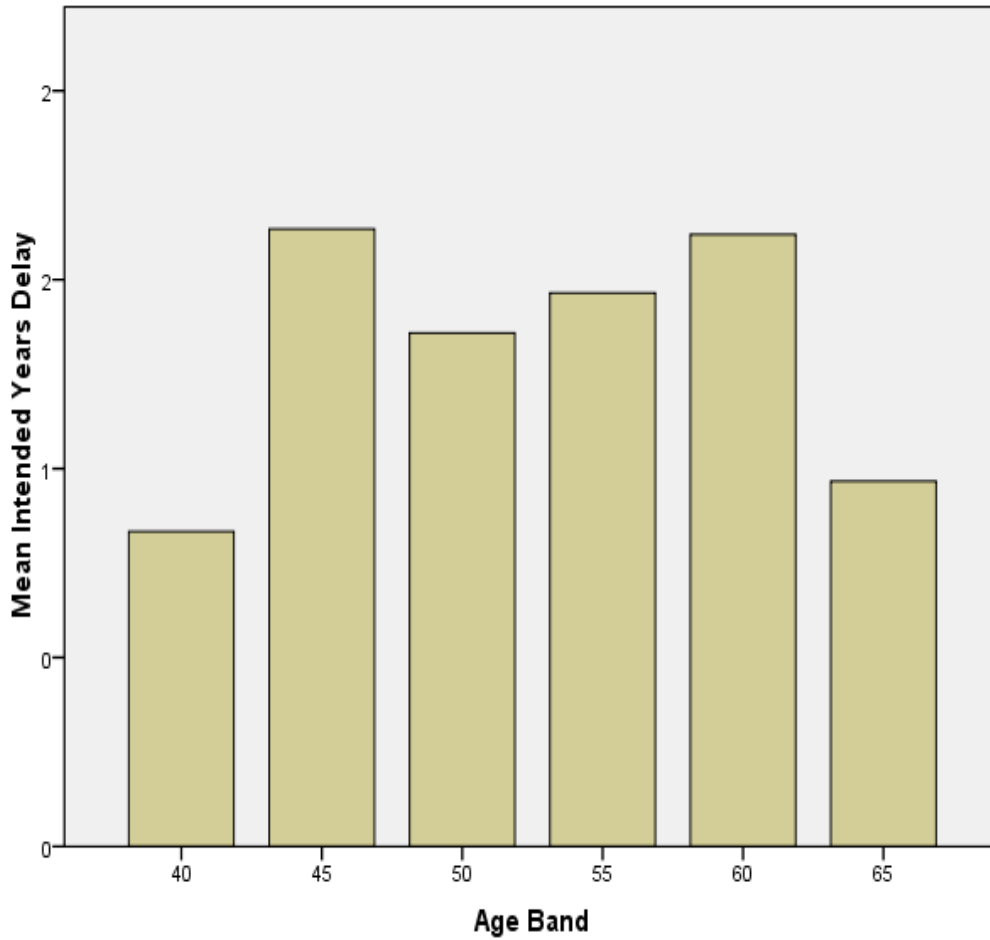
Table 8. Summary of Multiple Correlations for Predicting Workforce Withdrawal Intention, Normative Retirement Age Belief, and Post-Retirement Work Intention.

	Step	Step	Step	Step	Step	Step
	1	2	3	4	5	6
Predictor	Context	Person	Traits	State	Work	Ret.Att
Normative Retirement Age Belief						
R <sup>2</sup> in isolation	.004	.076**	.049**	.006	.056**	.058**
R <sup>2</sup> to add	.002	.076**	.027**	.001	.029*	.034**
Total R <sup>2</sup>	.002	.078**	.105**	.107**	.135**	.169**
Post-Ret. Wk Intention <sup>a</sup>						
R <sup>2</sup> in isolation	.030	.020	.052**	.009	.013	.043**
Total R <sup>2</sup>	.030	.046	.106**	.108**	.113**	.136**
Workforce Withdrawal Intention						
R <sup>2</sup> in isolation	.013*	.393**	.035**	.011	.009	.054**
R <sup>2</sup> to add	.019**	.391**	.049**	.002	.006	.004
Total R <sup>2</sup>	.019**	.410**	.459**	.461**	.468**	.472**

Note: N= 355. Step 1 is a single degree of freedom in the numerator; Step 4 is two degrees of freedom each in the numerator; Steps 2 and 3 are three degrees of freedom, Steps 5 and 6 are four degrees of freedom. <sup>a</sup> Binary Logistic Regression Analysis with Cox & Snell R<sup>2</sup>, N = 382.

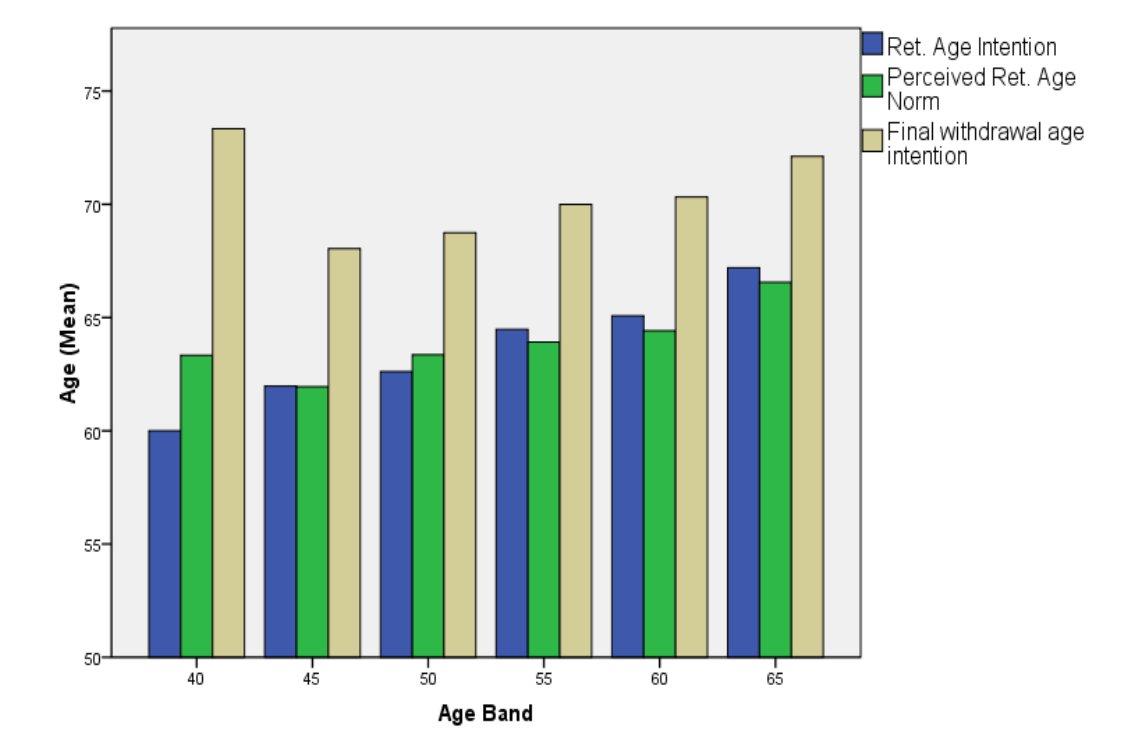
\*  $p < .05$ ; \*\*  $p < .01$

Figure 1. Mean Years Intended Retirement Delay by Chronological Age Band.



Note. N = 179.

Figure 2. Mean Retirement Age Intentions, Perceived Retirement Age Norm, and Final Withdrawal Age Intention by Chronological Age Band.



## References

- Abdel-Halim, A. A. (1981). A reexamination of ability as a moderator of role perceptions--satisfaction relationship. *Personnel Psychology, 34*(3), 549-561.
- Adams, G. A. (1999). Career-related variables and planned retirement age: An extension of Beehr's model. *Journal of Vocational Behavior, 55*(2), 221-235.
- Adams, G. A., & Beehr, T. A. (1998). Turnover and retirement: A comparison of their similarities and differences. *Personnel Psychology, 51*(3), 643-665.
- Adams, G. A., Prescher, J., Beehr, T. A., & Lepisto, L. (2002). Applying work-role attachment theory to retirement decision-making. *International Journal of Aging & Human Development, 54*(2), 125-137.
- Beehr, T. A., Glazer, S., Nielson, N. L., & Farmer, S. J. (2000). Work and nonwork predictors of employees' retirement ages. *Journal of Vocational Behavior, 57*(2), 206-225.
- Brougham, R. R., & Walsh, D. A. (2005). Goal expectations as predictors of retirement intentions. *International Journal of Aging & Human Development, 61*(2), 141-160.
- Dendinger, V. M., Adams, G. A., & Jacobson, J. D. (2005). Reasons for working and their relationship to retirement attitudes, job satisfaction and occupational self-efficacy of bridge employees. *International Journal of Aging & Human Development, 61*(1), 21-35.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*, 500-507.
- Filer, R. K., & Petri, P. A. (1988). A job characteristic theory of retirement. *Review of Economics & Statistics, 70*, 123-130.

- Griffin, B., & Hesketh, B. (2008). Post-retirement work: The individual determinants of paid and volunteer work. *Journal of Occupational and Organizational Psychology, 81*, 101-121.
- Henderson, M., & Argyle, M. (1985). Social support by four categories of work colleagues: Relationships between activities, stress, and satisfaction. *Journal of Occupational Behavior, 6*, 229-239.
- Higgins, E. T. (1997). Beyond Pleasure and Pain. *American Psychology, 52*, 1280-1300.
- Joulain, M., Mullet, E., Lecomte, C., & Prevost, R. (2000). Perception of 'appropriate' age for retirement among young adults, middle-aged adults, and elderly people. *International Journal of Aging & Human Development, 50*(1), 73-84.
- Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. *Academy of Management Review, 29*(3), 440-458.
- Kanfer, R., & Ackerman, P. L. (2007). Aging and work motivation. In C. Wankel (Ed.), *Handbook of 21st Century Management*. New York, NY: Sage Publications, Inc.
- Kanungo, R. N. (1982). *Work Alienation*. New York: Praeger.
- Kooij, D., De Lange, A. H., Jansen, P. G. W., Kanfer, R., & Dikkers, J. (in press). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior*.
- Mor-Barak, M. (1995). The meaning of work for older adults seeking employment: The Generativity factor. *International Journal of Aging & Human Development, 41*(4), 325-344.
- Mutran, E. J., Reitzes, D. C., & Fernandez, M. E. (1997). Factors that influence attitudes toward retirement. *Research on Aging, 19*(3), 251-273.

- Naude, S., O'Driscoll, & Kalliath, T. J. (2009). Predicting employees retirement intentions in New Zealand: The contribution of personal, job related, and non-work factors. *New Zealand Journal of Psychology, 38*, 11-23.
- Paullay, I. M., Alliger, G. M., & Stone-Romero, E. F. (1994). Construct validation of two instruments designed to measure job involvement and work centrality. *Journal of Applied Psychology, 79*, 224-228.
- Posner, R. A. (1995). *Aging and old age*. Chicago: University of Chicago Press.
- Reitzes, D. C., Mutran, E. J., & Fernandez, M. E. (1998). The decision to retire: A career perspective. *Social Science Quarterly, 79*(3), 607-619.
- Schmidt, J. A., & Lee, K. (2008). Voluntary retirement and organizational turnover intentions: The differential associations with work and non-work commitment constructs. *Journal of Business Psychology, 22*, 297-309.
- Schmitt, N., & McCune, J. T. (1981). The relationship between job attitudes and the decision to retire. *Academy of Management Journal, 24*(4), 795-802.
- Shultz, K. S. (2003). Bridge employment: Work after retirement. In G. A. Adams & T. A. Beehr (Eds). *Retirement: Reasons, processes, and results* (pp. 53-82). New York: Springer.
- Shultz, K. S., Morton, K. R., & Weckerle, J. R. (1998). The influence of push and pull factors on voluntary and involuntary early retirees' retirement decision and adjustment. *Journal of Vocational Behavior, 53*(1), 45-57.
- Stawski, R. S., Hershey, D. A., & Jacobs-Lawson, J. M. (2007). Goal clarity and financial planning activities as determinants of retirement savings contributions. *International Journal of Aging and Human Development, 64*, 13 – 32.



- Taylor, M. A., & Shore, L. M. (1995). Predictors of planned retirement age: An application of Beehr's model. *Psychology and Aging, 10*, 76-83.
- Topa, G., Moriano, J. A., Depolo, M., Alcover, C. M., & Morales, J. F. (2009). Antecedents and consequences of retirement planning and decision-making: A meta-analysis and model. *Journal of Vocational Behavior, 75*, 38-55.
- U. S. Bureau of Labor Statistics (Producer). (2010) Labor Force Statistics from the Current Population Survey, Seasonally Adjusted Unemployment Rate, 2008–2010. Retrieved from <http://data.bls.gov/PDQ/servlet/SurveyOutputServlet>.
- Zacher, H., & Frese, M. (2009). Remaining time and opportunities at work: Relationships between age, work characteristics, and occupational future time perspective. *Psychology and Aging, 24*, 487-493.
- Zaniboni, S., Sarchielli, G., & Fraccaroli, F. (2010). How are psychosocial factors related to retirement intentions? *International Journal of Manpower, 31*, 271-285.