2005

Bridge employment: Can occupational self-efficacy determine which bridges are crossed?

Alex Brody

BRIDGE EMPLOYMENT:

CAN OCCUPATIONAL SELF-EFFICACY DETERMINE WHICH BRIDGES ARE CROSSED?

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

in

Psychology:

Industrial/Organizational

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ABSTRACT

A conceptual model examining the antecedents and outcomes of occupational self-efficacy among the older workforce is presented. Proposed antecedents to occupational self-efficacy included self-perceived stereotypes and work demands. Outcomes explored are one's intention to continue in the same career, retire, or engage in some form of bridge employment. In addition, past predictors of retirement/employment decisions such as age, health, and income were utilized, in order to determine whether or not occupational self-efficacy aids in intention prediction over and above demographic variables. In total, five hypotheses were proposed and two were supported. For example, the more negative one's self-perceived age stereotype, the lower one scored on all three dimensions of the occupational self-efficacy scale. Furthermore, those with higher performance occupational self-efficacy were 5.21 times more likely to intend to engage in bridge employment than to retire. Additional results, implications, and future research areas are discussed.

ACKNOWLEDGMENTS

I would like to thank my friends, family, and faculty for supporting me in making this painstakingly glorious accomplishment. Grades are important in getting through school, but had it not been for these Fs, I never would have made it.

I would especially like to thank my advisor, Kenneth S. Shultz. Had it not been for his Zeus-like lightening speed turnaround in providing input and reviewing my drafts, I would not be writing this. Congratulations on your beautiful new little girl. I would also like to thank my committee members, Mark D. Agars and Joanna S. Worthley, for their support, input, and flexibility.

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CHAPTER ONE

INTRODUCTION

The baby-boom generation represents the largest single sustained population increase in U.S. history, consisting of 83 million individuals (AARP, 1999). The number of people over the age of 65 years old is expected to increase from the current level of approximately 34.4 million (13% of the population) to 70 million (20% of the population) by 2030 (Adams & Rau, 2004). Middle-income earners of the baby boom generation make between $25,000 to $75,000 a year and have only moderate levels of savings, pensions, and health insurance (Taylor & Doverspike, 2003). Based on these facts, one-fifth of the nation's population will be over the age of 65 years old in only a couple decades. Many of these older adults may still be working by choice or necessity. Although it is a fact that the workforce will soon be older than ever before, little has been researched as to what antecedents govern whether and in what industry an older person chooses to work (Shultz, 2003). Bridge employment is the term used to describe the paid employment of an older worker between the time career work has ended and full retirement begins. Thus, a major goal of the

present study was to understand how demographic characteristics, job demands, and psychological factors play a role in governing the bridge employment intentions of older workers.

Contingent Work

Contingent workers are those who are part-time, temporary, contract, seasonal, and/or casual workers (Hulin & Glomb, 1999). These employees already make up 25% of the workforce and with the continuation of organizational flattening and downsizing, these numbers are expected to grow (Conference Board, 1995). The contingent worker industry appears to persist and has a sound financial basis (Hulin & Glomb, 1999). The contingent workforce is also growing due to the large numbers of older workers that exit their "career jobs" early and enter part-time or temporary employment (i.e., engaging in bridge employment) rather than working in their careers until directly entering leisure retirement, as did most of their predecessors (Shultz, 2001).

Contingent employees are especially attractive to organizations because they typically make less, are offered fewer fringe benefits, participate in less company

training, and reduce the need for layoffs of permanent employees (Farr, Tesluk, & Klein, 1998). Furthermore, the Bureau of Labor Statistics reports that temporary workers produce the equivalent of two more hours of work per day than their permanent counterparts (Caudron, 1994). These results concur with the finding that the average employee spends approximately 50% of his or her time on non-work tasks (Miller, 1983). Unlike permanent employees, part-time workers tend to feel removed from the organization, which leads to their general tendency to not spend as much time socializing or engaging in office politics (Hulin & Glomb, 1999).

On the flip-side, organizations need to consider the potential costs of training temporary workers in terms of a utility analysis. For example, temporary employees cost organizations more in terms of mistakes made compared to permanent employees (Davis-Blake & Uzzi, 1993). In addition, part-time employees have also been found to engage in less contextual performance (e.g., exerting extra effort, supporting the organization, commitment, volunteering suggestions for improvement) than their full-time counterparts (Borman & Motowidlo, 1993). These findings suggest that if contingent employees are to be

used for highly skilled positions requiring increased commitment, then permanent part-timers, independent contractors, and working closely with a few reliable staffing agencies may be the best options for most organizations (Feldman, Doerpinghaus, & Turnley, 1994).

Although findings from the organizational perspective seem promising regarding contingent employees, findings on the individual side are ambivalent. After controlling for demographic characteristics, part-time employees have been found to have lower satisfaction with work, benefits, the job overall (Miller & Terberg, 1979), their careers (Hall & Gordon, 1973), coworkers and pay, than full time employees (Steffy & Jones, 1990). Other research studies have found part-time workers to have better attitudes than full-time employees (Eberhardt & Shani, 1984) or no significant differences (Logan, O'Reilly, & Roberts, 1973; McGinnis & Morrow, 1990). These equivocal results may be explainable in that there may be as much variance within groups of contingent workers as there is between contingent and full-time traditional employees (Feldman, 1990; McGinnis & Morrow, 1990).

For example, a study was conducted that divided temporary part-time workers into those who chose to work as

temporary employees voluntarily and those who worked as temporary employees only because they could not find permanent work (Feldman, Doerpinghaus, & Turnley, 1994). It was found that those who worked as temporary employees voluntarily had higher levels of general satisfaction, commitment, satisfaction with pay, perceived fairness of compensation, satisfaction with their agency, and satisfaction with life as a temporary worker. One of the most likely subsets of contingent employees to desire temporary or part-time employment would be older workers in early retirement. These individuals often desire the flexibility of being able to work fewer hours or part of the year, which simply is not an option for many permanent employees (Shultz, 2001). If older temporary employees have higher job satisfaction than other members of the contingent workforce, older employees would be less likely to display work and job withdrawal (Hanisch & Hulin, 1990, 1991; Hulin, 1991) and more likely to display organizational commitment than their less satisfied counterparts (O'Reilly & Chatman, 1986). Thus, understanding the intentions of employees seeking bridge employment would be a real asset to organizations as contingent employment is becoming increasingly more

desirable to employers. Thus, older workers wishing to leave their full-time careers should be prime candidates for these types of positions.

Demographic Changes

Another factor that separates retirees from the rest of the workforce (besides age) is their numbers. The proportion of the U.S. labor force aged 18-34 has been declining since the early 1980s (Schooler, Caplan, & Oates, 1998). In addition, fewer people are entering the job market than ever before. This is leading to a shrinking pool of entry-level talent (Pearlman & Barney, 2000). Ill-qualified and fewer entrants in the labor force increase the demand to retain those with the knowledge, skills, and abilities to get the job done.

Older workers who are skilled, flexible, and open to learning new attributes to their current jobs will be rather expensive to replace" (Sterns & Gray, 1999). If retirees switch industries or choose not to work, much, if not all, of this experience is lost. In addition to their qualifications, older workers have been shown to have fewer accidents, less voluntary absenteeism, lower turnover rates, and higher levels of job satisfaction, job

involvement, job commitment and Protestant work ethic (Rhodes, 1983; Salthouse & Maurer, 1996; Stagner, 1985; Sterns & Gray, 1999; Warr, 1994; Weckerle & Shultz, 1999). In addition, the finding that contingent employees generally lack contextual performance may not apply to older contingent employees. Studies have found that older individual's work tends to be of greater consistency, quality, and conscientiousness than that of younger workers (Farr, Tesluk & Klein, 1998; Warr, 1994). In addition, conscientiousness appears to be the strongest predictor of contextual performance (Borman & Motowidlo, 1993). Further research may uncover that older contingent employees exert performance behaviors that are more likely to support the larger organizational, social, and psychological environment than younger contingent employees or possibly even full time younger employees. As a result, these findings, along with the experience that comes with the age of an older worker, may prove to make the older worker more valuable to an organization than a younger worker in terms of overall performance and cost.

For example, McNaught and Barth (1992) conducted one of the few applied studies where the utility of older employees was compared to that of younger employees. This

study was conducted using reservation agents working for the Days Inn of America hotel chain. McNaught and Barth found that older trainees initially took a couple extra days to adjust to the technology. However, trainers learned to adjust training techniques so that older employees felt more relaxed and confident creating a situation where both groups were trained just as quickly and at the same cost. Regarding retention, it was found that one year after being hired 87% of older workers remained on the job whereas only 30% of younger workers were retained. It was also found that older workers received higher wages because they stayed on the job much longer and although they spent more time talking to callers, they had a higher success rate in booking reservations. The bottom line was that the net cost of hiring older workers was analogous to the cost of hiring a younger employee keeping in mind that the turnover problem was significantly improved.

The postponement of older workers entering traditional retirement may prove to be an economic necessity as well as a business necessity. Historically, the vast majority of American men worked well into their mid-sixties. That trend has largely diminished post World War II. In the early 1950s two-thirds of 65 year-old men were in the labor force

(Quinn, 1999). However, today people are retiring at younger ages than ever before and at the same time are living longer than ever before (Shultz, 2001). This fact, when combined with the aging of the baby boom cohort towards retirement, will drastically increase the dependency ratio (rate of nonworking individuals to the rate of working individuals to support them) if similar trends continue (Shultz, 2001).

The balancing of this dependency ratio, which will be 2.3 to 1 in the U.S. by the year 2030 (Quinn, 1999), is crucial in order for Social Security and Medicare to exist without government intervention. This is due to the fact that funding for these programs is currently being spent faster than it can be obtained (Shultz, 2001). The dependency ratio is already at a 2 to 1 ratio and with time, the amount of older dependents relative to child dependents will increase (McDevitt & Rowe, 2000). Should early retirement trends remain constant along with current tax and benefit rules, not only will funds be depleted, but there will be large annual deficits by 2032 (Quinn, 1999). With the declining fertility rate in America, this ratio cannot be balanced without the help of those of retirement age. The shortage of qualified entrants in the labor force

and the increasing number of retirees leaving the labor force not only effects employers, but the entire economy.

Should Social Security and Medicare lose funding through bankruptcy or public policy changes, the welfare of older Americans will be in grave danger. Surveys show that in 1999, 40% of Americans aged 51-60 who were currently employed would have no pension income other than Social Security were they to retire (Sterns, 1998). "Twenty percent of all house holds had no assets (house, investments, or savings)" (Sterns, 1998, p.134). The overall poverty rate among older people in 1999 would have been 48% without Social Security compared to the actual 8% (Social Security Administration, 2001; Szinovacz, 2003). Since Social Security is seldom enough money to live off of, the next generation of employees may be forced to work whether they like it or not to supplement their pension, personal savings, and/or benefits.

There are those who believe that although the baby boom generation is approaching the typical age of retirement, it will not likely result in a labor shortage. For example, Cappelli (2004) believes that because the generations following the baby boom generation are on the whole higher educated and because of immigration and global

outsourcing, employers will be able to meet needed productivity levels even once the baby boom generation has fully retired. Cappelli argues that European countries with declining birth rates still face relatively high unemployment rates even though the scarcity of younger workers should result in a tight labor market. Despite this point of view, he still agrees that employers will be at a tremendous advantage if they can create flexible policies that both enable and entice America's aging workforce to continue to put their valuable experience and skills to use. Thus, even if there is not a shortage of workers in the future due in part to the increasing number of retirees, employers would be wise in retaining this demographic group. Additionally, even if there is not a shortage of employees, the problems of national Social Security debt as well as retiree poverty rates will likely persist should Cappelli's scenario unfold.

Working after retirement is likely to occur for both monetary and non-monetary reasons. Work provides a sense of structure, the ability to develop new skills, maintain social interactions, a sense of identity, and a sense of doing something worthwhile (Sterns, 1998). No longer being able to interact with coworkers is the most often cited

disadvantage of retirement (Taylor & Doverspike, 2003). Although the benefits of these intrinsic rewards of work are recognizable to the workforce as a whole, Sterns (1998) notes that as one ages these intrinsic rewards actually become more important. Continuing to work during retirement may also help to sustain cognitive functioning (Warr, 1998). Thus, relieving financial burdens imposed on the individual and society at large are not the only beneficial aspects generated should individuals choose to continue working in some capacity past the typical age of retirement.

Bridge Employment

Many of the retirees that are part of the contingent workforce are classified as those working in bridge employment (Feldman, 1994). Although bridge workers who stay in their career industry after retirement are expected to receive higher earnings, over half of those age 60 have left their career jobs even though only one in nine have retired (Ruhm, 1990). However Feldman (1994) notes that the antecedents of industry choice in bridge employment are not fully known. Weckerle and Shultz (1999) found that voluntariness of retirement, anticipated financial reward,

and flexibility separated those considering early retirement from those who did not. In addition, age, salary, health, organizational tenure, having a working spouse, and having dependent children have also been found to influence whether or not one chooses to accept bridge employment (Kim & Feldman, 2000). Commitment to one's spouse and children determine how many hours one will work each week, what type of work situations they find most attractive, and the level of their career aspirations (Hochschild, 1997). Adams and Rau (2004) examined several biographical, social, and self-evaluation variables in relation to retirees seeking employment. Although some biographical variables (gender, income, and search constraints) and a social variable (work ethic) were found to predict job seeking, the self-evaluation variable of job-seeking self-efficacy was not found to be related to actual job seeking. Although some antecedents have been found that seem to guide the direction one heads after retirement, few studies have taken a look at how these variables are internalized and how psychological variables play a role in the retirement process (Shultz, 2003). The present study is designed to resume where Adams and Rau (2004) left off in a continued effort to uncover additional

psychological variables that are predictive of bridge employment intentions.

To some extent, one would assume that the field one chose his/her career in would still be of interest to that individual later in life and that a higher salary would also help to induce the employee to remain within the same field after retirement should this individual have the choice to continue working in some paid capacity. This study addresses several of the known antecedents, as well as psychological perceptions regarding these antecedents to determine if adding retiree's perceptions significantly increases predictability regarding one's bridge employment intentions.

The Bridge Model of Occupational Self-efficacy

A conceptual model is presented in order to provide insight as to why the majority of bridge employees choose to switch industries after they retire from their career jobs as well as shed light on what kind of psychological developments occur in the aging employee regarding employment interests and occupational self-efficacy. This

conceptual model as presented in Appendix A will be explained from left to right.

Stereotypes and Occupational Self-efficacy

The presence of older worker stereotypes may have an effect on how the older worker is evaluated and how the older worker evaluates him/herself. Stereotypes can be either positive or negative and therefore, can be harmful or beneficial. Although the Age Discrimination in Employment Act (ADEA) prohibits discrimination on the basis of age protecting anyone age 40 years old or over, stereotypes are likely to persist to some degree. It is important to note much of the negative stereotypes are inaccurate and that the persistence of these inaccurate stereotypes can have a profound effect on the employee's self-efficacy, self-concept, and ultimately whether or not an older employee chooses to remain in an organization or the labor-force in general.

Older workers (i.e., those in their 50s-60s) tend to be perceived as being deficient in terms of job performance (Sterns & Gray, 1999). However, findings through scientific research have been inconsistent at best in validating the claim that with age comes a decrement in performance (Salthouse & Maurer, 1996; Shultz & Morton, 2000). Meta-

analytic studies by Waldman and Avolio (1986) along with McEvoy and Cascio (1989) found weak positive average correlations between age and job performance. Salthouse and Maurer (1996) cite many studies and meta-analytic results where limited data, weak power, restricted age range, selective attrition, nonequivalent responsibilities, biased assessment, and insensitive assessment confound these kinds of studies, which possibly explain the inconsistent results. While it is true that some abilities (e.g., eyesight, hearing, strength, and endurance) and fluid knowledge are lessened with age (Forteza & Prieto, 1994; Stagner, 1985), experience may more than compensate to keep performance up by generating more job-relevant knowledge and skills (Salthouse & Maurer, 1996; Warr, 1994). Decreases in information-processing capabilities (Schacter, 2001) and physical capabilities (Rhodes, 1983) appear to motivate individuals to acquire different skills or to seek out new work environments over time (Feldman, 2002). In addition, older workers may take longer to train and display less mastery of new training material than younger workers (Kubeck, Delp, Haslett, & McDaniel, 1996), but they have also been found to be given fewer training opportunities. Whether it is wisdom through experience,

selective attrition, or poor study designs, research in field settings has resulted in inconsistent findings regarding the relationship between age and performance. The bottom-line is that there is probably little to no correlation between age and job performance in older workers in their 50s and 60s. The most appropriate conclusion regarding these common stereotypes is to disregard them by evaluating each individual based on his own merits, skills, abilities, and motivation (Sterns & Gray, 1999). The assumption that the mean level of functioning at any given age represents the functioning of a particular worker at that age may be convenient, but it is indefensible (Schooler, Caplan, & Oates, 1998).

Another negative stereotype that should be disregarded is that older people are "set in their ways" (Cavanaugh & Whitbourne, 1999). For example, managers are less likely to perceive older employees as flexible and adaptable than younger employees (Rosen & Jerdee, 1977). In an age where innovation and being proactive is as important as any other company resource, this stereotype can be extremely detrimental towards older workers. For example, Schaie and Willis (1991) were able to test this stereotype by looking at cohort effects, rather than age. Using past studies in

sequential designs, Schaie and Willis revealed that age does not in fact predict one being set in their ways. Over a 70 year period it was found that successive generations have become increasingly more flexible in personality style, behaviors, and attitudes.

Positive or negative stereotypes when internalized by the supervisor or the employee can turn into self-fulfilling prophecies (Eden, 1993). Acting to cause Pygmalion and Golem effects, stereotypes that alter perceptions have proven to be powerful predictors of success and failure. Positive stereotypes may also lead to increased self-efficacy, self-expectations, and enhanced performance (Sterns & Gray, 1999). Higher self-efficacy results in increased goal setting, commitment, and persistence in the face of obstacles (Bandura, 1989; Sterns & Gray, 1999). Conversely, negative stereotypes could lead to decreased self-efficacy resulting in lower motivation, lower commitment, and avoidance behaviors (Bandura, 1989; Sterns & Gray, 1999). In addition, Rosen and Jerdee (1977) found that managers are less likely to give an older person feedback about needed performance changes, support the career development or retraining of older workers, or promote older workers when compared to younger employees.

The simple decision to retrain an older employee when her position evolves with technology can lead to this employee's goal attainment, engagement in future retraining, and increases in identity, self-esteem, efficacy, and commitment (Sterns & Subich, 2002). Should the stereotype that old dogs can't learn new tricks dominate organizational beliefs, older employees may be likely to exhibit withdrawal and a sense of inability.

Bandura (1989) defined self-efficacy as the self-evaluation of one's abilities to complete a certain task or attain a certain level of achievement or performance. Self-efficacy has been found to predict 23 percent of the variance in occupational choice (Donnay & Borgen, 1999). Interest alone has been able to predict 20 percent of the variance in occupational group membership (Donnay & Borgen, 1999). Together these variables have predicted 38 percent of the variance in group membership in midlife adults. A potential problem is when interests and efficacy conflict. Other findings reveal that when men have career aspirations that are inconsistent with their work skills, they are more likely to change their aspirations than their occupations (Gottfredson & Becker, 1981). Warr (1994) suggests that after older workers experience declines in value, they may

move into different jobs that are more compatible with their abilities. A reduction in some specific occupational self-efficacy then may lead to the pursuit of another interest in which the individual is more confident in her ability (e.g., an athlete who no longer feels able to compete on the field may decide to become a coach).

Three components of occupational self-efficacy among older workers appear to be associated with continued confidence and career motivation (Fletcher, Hansson, & Bailey, 1992). The first component (F1) is the individual's belief in her ability to meet occupational goals, persevere, contribute productively, and be a safe worker. The second component (F2) is the ability to change and learn new technologies. The third component (F3) is the belief in one's social organizational competence, ability to work with others, earn coworker's trust/cooperation, and deal with interpersonal difficulties.

Hypothesis 1: The more positive the perceived stereotypes of older workers the more positive the ratings will be on the three components (achieving occupational goals, learning new technologies, and organizational/social competence) of the occupational self-efficacy scale (see Appendix A, Figure 2).

Although the combination of these factors represent occupational self-efficacy, this study puts forth the idea that in many cases, an employee can be successful and believe she can continue to perform well on a given job or seek new employment without scoring high on all of these components. This idea will be tested by determining if one's self-beliefs in performance ability relative to these three occupational self-efficacy components will in part, regulate the bridge employment decision in choosing to stay in the same job or industry, switch industries, or retire altogether (see Appendix A, Figure 1).

As mentioned earlier, meta-analytic studies are inconclusive at best in pooling together studies that link work performance and age. Weak positive to weak negative average correlations have been found regarding the relationship between age and performance. Thus, the conclusion is that age cannot be a decisive factor in the hiring decision for both empirical and legal reasons (Park, 1994). What is counterintuitive about this conclusion is the fact that the best predictor of performance across jobs is cognitive ability (Hunter & Hunter, 1984) and there are countless laboratory studies that conclude that cognitive function declines with age (e.g., Cerella, Poon, &

Williams, 1980; Kausler, 1990; Salthouse, 1985). If cognitive ability predicts job performance and cognitive ability declines with age, should job performance not decline with age as well? Park (1992) suggests that the reason for this outcome is due to the maintenance hypothesis. Maintenance situations, as defined by Murphy (1989), are situations familiar to the employee where tasks performed require very few cognitive resources. Park (1992) and Murphy (1989) state that older adults typically occupy positions that require very little resource-demanding transition phases (i.e., static jobs). This explains why the decline in cognitive ability with age is inconsequential regarding older workers ability to get the job done (Park, 1992; Rhodes 1983). Having accrued more knowledge, problem-solving skills, domain-specific expertise, and wisdom, older workers perform as well in general as their younger counterparts due to compensatory factors (Park, 1992). Examples of such factors are writing things down, the ability to chunk information into existing knowledge structures, and a higher availability of collaborators and assistants (Birren, 1969; Craik & Byrd, 1982; Park, 1992).

Hypothesis 2a: Participants will score higher on the first component of occupational self-efficacy (belief in their ability to meet occupational goals, persevere, contribute productively, and be a safe worker) when they occupy positions in a static environment as compared to working in a dynamic environment (see Appendix A, Figure 2).

Hypothesis 2b: Participants will score lower on the second component of occupational self-efficacy (belief in their ability to change and learn new technologies) when they occupy positions in a static environment as compared to working in a dynamic environment (see Appendix A, Figure 2).

Those who score high on the ability to meet occupational goals component will most likely intend to stay in their same position versus intend to participate in bridge employment or retire. The barrier presented to the older worker in such a scenario is that in order to change positions, another transitional phase most likely will occur in that training, learning, and readjusting to the new position may be perceived as just as difficult, if not more so than maintaining the current position.

The second component of occupational self-efficacy is the ability to change and learn new technologies. It is argued here that this type of self-efficacy would not be a necessary characteristic of a worker who belonged in a maintenance position. An older worker could conceivably work in a position characteristic of familiar tasks and situations relying on experience or crystallized knowledge to get the job done and in such an instance would be less likely to need new learning or training.

This situation would be most likely to occur in a golden handcuffs situation where the perceived benefits of staying in a certain position one is no longer really interested in or challenged by is eventually lifted, allowing the individual the freedom to leave their former position and seek a new and more cognitively challenging form of employment. Thus, those who score low on the ability to change and learn new technologies component will most likely continue to work in their current positions or retire versus intend to participate in bridge employment. This is because perceived ability will match work requirements. Changing industries in such a situation would be perceived as a major obstacle due to the fact an employee fitting this description would have to learn new

skills and abilities in order to switch industries despite their perceived inability to do so. Alternatively, upon retirement, low scoring individuals seeking bridge employment will be more likely to seek positions requiring little initial training and minimal subsequent retraining to match their perceived lower ability regarding change and technology. An example of such an occurrence would be a retiree picking up a part-time position in the service industry.

The third and final component of occupational self-efficacy is the belief in one's social organizational competence, ability to work with others, earn coworker's trust/cooperation, and deal with interpersonal difficulties. As stated previously, studies have found that older individuals tend to demonstrate more conscientiousness than younger workers (Farr, Tesluk & Klein, 1998; Warr, 1994). Conscientiousness appears to be the strongest predictor of contextual performance (Borman & Motowidlo, 1993). This would mean older workers are more likely to support the organizational, social, and psychological environment than younger employees. This finding would be concurrent with Craik and Byrd (1982) that older managers are more reliant on social skills and

environmental support than are younger managers. Craik and Jennings (1992) suggest that the increase in environmental support mitigates against age related performance declines. The ability to work with others is a skill under much demand in the service sector, but one must also remember that this factor in general is very necessary in most organizational contexts. For example, Birren (1969) found that with age professionals were more likely to utilize their colleagues for advice and assistance. Thus, those who score high on the social factor will be more likely to seek bridge employment and/or maintain their pre-retirement positions rather than fully retire.

Hypothesis 3: F1-F2+F3= CONTINUED EMPLOYMENT IN CURRENT JOB/INDUSTRY UNTIL RETIREMENT. Those high in work performance (F1) and organizational/social competence (F3) but low in learning self-efficacy (F2) most likely occupy maintenance jobs that are static in nature. They will continue in their current employment up until full retirement because their position matches their current level of abilities (see Appendix A, Figure 3).

Hypothesis 4: -F1+F2+F3 = BRIDGE EMPLOYMENT. Those low in work performance (F1), but high in learning self-efficacy (F2) and organization/social competence (F3) will

intend to pursue different careers and retraining in the pursuit of a seeking a new position (see Appendix A, Figure 4).

Hypothesis 5: -F1-F2-F3= RETIREE. Participants who score low on all factors, or even two out of three of the occupational self-efficacy scales, will feel forced to retire, which should reflect their intentions. An employee who does not perceive they are meeting occupational goals and believes they cannot change and learn new technologies, nor relate to coworkers in a sociable manner, would probably intend to leave the workforce entirely as well (see Appendix A, Figure 5).

CHAPTER TWO

METHOD

Participants

The participants in this study were 323 workers age 50 and older employed in a variety of organizations throughout the United States. Participation was administered in part, by using Zoomerang (Zoomerang, 2005), an online survey company. One hundred and eighty six participants were obtained using a computer based survey, which was distributed via the Internet through discussion boards geared towards older adults, as well as through email by emailing those known by the researchers and providing them with a hyper-link to the survey (please see Appendix B for a listing of the websites used to solicit participation). It is unknown whether all online participants were from the United States as the internet can be accessed from anywhere around the world. Through the utilization of Zoomerang, survey items are constructed as they would be in typical paper and pencil format, only they are completed using a computer, which has access to the Internet. An additional 137 participants were obtained through paper and pencil techniques. These participants were either asked to

participate by the researcher directly or contacted by an undergrad psychology student at a large western university to complete the survey in order to obtain extra credit. All participation was voluntary. Multiple techniques were used in obtaining this sample in order to find enough participants to run the analysis, as well as to hedge against results that would be less likely to generalize.

In conducting the study, the researchers felt it important to target subjects through computer as well as paper and pencil methods ensuring that participants that may not be computer savvy were also included in the study (please see Appendix C for a breakdown of participant demographics and attitudinal variable scores for both the paper and pencil as well as electronic versions of the survey). In general, those who took the online version of the survey had a higher education level, salary, and were more likely to be Caucasian than those who took the paper and pencil version of the survey. Those that took the paper and pencil survey were more likely to have jobs in the wholesale/retail industry and less likely to have jobs in the education industry compared to those who took the online survey. Online participants scored higher on the job demands scale and the performance occupational self-

efficacy scale. Paper and pencil participants scored higher on the personal efficacy beliefs scale. Other than these few differences, both groups of participants were basically the same regarding gender, health, marital status, employment of spouse, number of dependent children, and industry worked in. Sampling from a computer and snowball technique in this manner was thought to yield results that would be easier to generalize to the baby boom generation. Additionally, utilizing both of these methods allowed for sufficient power to be obtained to conduct the multinomial logistic regression analysis. Therefore, the two groups were combined for all subsequent analyses.

In total, the sample consisted of 132 men (41%) and 190 women (59%), ranging in age from 50 to 96 years of age (M=59.55, SD=5.97). Regarding ethnicity, 256 participants were Caucasian (79.3%), 30 participants were Hispanic or Latino (9.3%), 16 participants were African American (5%), 8 participants were Asian (2.5%), 4 participants were American Indian (1.2%), 5 participants fell into the other category (1.5%) and 3 participants declined to say. Participants came from a wide variety of industries (including manufacturing, transportation, utilities, finance, insurance, service, health, real estate,

government/military, construction and technology) and the majority of participants in both groups had at least some college in their education backgrounds (see Appendix C for additional detailed demographic information).

Survey Design

The Occupational Self-Efficacy Index (OSEI) developed by Fletcher, Hansson, and Bailey (1992) was included in the survey. The OSEI uses a five-point Likert scale (1) "Worse than most" to (5) "Better than most" composed of 29 items (see Appendix D). It measures the beliefs of older adults regarding their continued ability to learn, adapt, and be productive in a changing workplace. The OSEI is a tool that is associated with older worker's continued confidence and career motivation. The instrument has been found to be reliable in the past(alpha =.94). The work performance, learning, and social competence factors of the OSEI were also found to exhibit strong internal consistency (alphas= .90, .87, and .85, respectively). A slightly modified version of an item from the Health and Retirement Study used by Weckerle and Shultz (1999) was used to measure future employment/retirement intentions. Scores on each of the three components of the OSEI were analyzed in order to

see if they predicted employment outcomes/intentions, were related to job demands, and supported the maintenance hypothesis, discussed earlier. Several items asking about the participant's demographic background were also included.

Stereotypes were measured using a semantic differential scale developed by Rothermund and Brandtstadter (2003). The scale consists of 32 questions covering a broad range of personality attributes (see Appendix D). Each item contains an antonym pair on opposite ends of a nine-point response scale, where participants rated their beliefs in stereotypes of the typical older worker. Lower scores represent positive stereotype beliefs and higher scores represent negative stereotype beliefs. Self-rating and stereotype ratings were both found to have strong internal consistency in prior studies (alphas= .92 and .93, respectively). This scale was originally written in German and was translated into English for the purpose of this study by several individuals, both native English and German speakers. One of the bilingual individuals involved in the translation also had a Ph.D. in industrial and organizational psychology. The survey was then sent back to the original authors (bilingual German/English) who

verified that it had been translated accurately to English (i.e., back translated it).

Current job demands were measured using the complexity and variety components of the Job Uncertainty, Complexity, Variety, and Interdependence scale developed by Dean and Snell (1991). The scale is 10 questions in length (three of which pertain to complexity and seven pertain to variety) and is in Likert format using a 7 point rating scale ranging from (1)"very little" to (7) "a great deal" (see Appendix D). The coefficient alpha values for each dimension have ranged from .69 to .80 across different types of jobs. Higher scores represent higher complexity and variety.

A second, broader work efficacy beliefs scale designed for the employee population in general was used in order to further partition and isolate unique variance belonging to the subscales of the occupational self-efficacy scale. To accomplish this, the Personal Efficacy Beliefs Scale (Riggs & Knight, 1994) was utilized in the survey. The scale consists of ten items, measured with a 5 point rating scale ranging from (1) "strongly agree" to (5) "strongly disagree" (see Appendix D). The reported coefficient alpha value for this scale is .80 in past studies.

Also included in the survey was an informed consent form the participant was issued prior to answering any survey questions as well as an explanation debriefing statement that the participant read after completing the survey. For the online version, the informed consent and explanation statement appeared before and after the participant had completed the survey, respectively. For the paper and pencil version, the informed consent form was the first page of the survey and the explanation statement was the last page (see Appendix E).

CHAPTER THREE

RESULTS

Prescreening of Data

Prior to hypothesis testing, variables were screened for outliers and normality of distribution (skewness and kurtosis). Following the guideline furnished by Tabachnik and Fidell (1996) items with z scores > 3.29 were identified as outliers (please see Appendix F for skewness and kurtosis of variables that contained outliers and/or were transformed). Outliers were found in five variables: perceived worker stereotypes (1 case with z >3.29), personal efficacy beliefs scale (6 cases with z > 3.29), the performance component of the occupational self-efficacy scale (2 cases with z > 3.29), the learning component of the occupational self-efficacy scale (1 case with z > 3.29), and the social-organizational component of the occupational self-efficacy scale (1 case with z > 3.29). These cases were identified and subsequently deleted.

After deleting the outlying cases, skewness and kurtosis for the variables originally containing outliers improved. However, significant skewness and kurtosis in the following variables led to the transformation computations

of three scale scores. The logarithm of the personal efficacy beliefs scale, and the square root of the performance and social-organizational efficacy belief components of the occupational self-efficacy scale were used in the logistic regression analysis. This led to approximate normality in both skewness and kurtosis for all three scaled variables. Although age, education, and income were also skewed variables, these variables were left unaltered in that their scores hold inherent meaning. Upon running the multinomial logistic regression both with and without transformation, results of the non-transformed model did not differ substantively from the transformed model. Therefore, the simpler model without transformed values was analyzed.

In evaluating the adequacy of expected frequencies, all expected cell frequencies for qualitative variables must be greater than one and no more than 20% of cell frequencies for any categorical cross-tab table may contain cell frequencies less than five when paired with employment intentions in order for the assumption to be met. Marriage status violated the assumption with 40% of the cells having less than five occurrences. For this reason, those widowed were combined with the single category and those who chose

the other category (predominantly elaborated in a follow-up question with life partner) were combined with the married category. Ethnicity had 66.7% of cases with less than five occurrences and eight expected values of less than one. For this reason, the categories were reclassified as Caucasian and other.

There was no evidence of multicollinearity as no correlations among the independent variables were at r = .90 or above (Tabachnik & Fidell, 1996). The highest correlation noted was r = .75.

After meeting the assumptions of expected frequencies, absence of outliers, and multicollinearity, the assumptions of multinomial logistic regression were met and analyses of the hypotheses were warranted, and subsequently conducted.

Evaluation of Hypotheses

Please see Appendix G for a summary of the hypotheses and Appendix H for a summary of the statistical analyses used to answer the hypotheses.

Hypothesis 1: Pearson Product Moment Correlation Coefficients were used in order to evaluate hypothesis 1. Hypothesis 1, stating that there would be a significant relationship between self-perceived positive stereotypes

(higher scores meant more negative stereotypes) and all three of the occupational self-efficacy components (higher scores meant higher self-efficacy), was supported (please refer to Appendix I containing the Pearson Product Moment Correlation Matrix). One's self-perceived stereotype was significantly correlated with performance occupational self-efficacy, r (320) = -.57, $p < 0.01$. One's self-perceived stereotype was significantly correlated with learning occupational self-efficacy, r (321) = -.62, $p < 0.01$. One's self-perceived stereotype was significantly correlated with social organizational occupational self-efficacy, r (321) = -.62, $p < 0.01$.

Hypothesis 2a: A Pearson Product Moment Correlation Coefficient was used in order to answer hypothesis 2a. Hypothesis 2a stated that a significant negative relationship between job demands (where a low score represents static jobs) and the first self-efficacy factor (work performance) was not supported, r (317) = .32, $p < 0.01$ in that although it was significant, it was in the opposite direction as hypothesized (please refer to Appendix I containing the Pearson Product Moment Correlation Matrix).

Hypothesis 2b: A Pearson Product Moment Correlation Coefficient was used in order to answer hypothesis 2b. Hypothesis 2b stated that a significant positive relationship between job demands (where a low score represents static jobs) and the second self-efficacy factor (ability to learn and change) was supported, r (318) = .40, $p < 0.01$ (please refer to Appendix I containing the Pearson Product Moment Correlation Matrix).

In order to test hypotheses 3-5, Multinomial Logistic Regression (MLR) was used to test the predictors of employment intentions in the same manner as was done in a recent study by Bennett, Beehr, and Lepisto (2005). The dependent variable, employment intention, was trichotomous and coded as 1=intend to retire, 2=intend to stay in current job/industry, and 3=intend to engage in bridge employment. Age, sex, race, income, health status, education level, spouse's retirement status, and number of children currently living within the household were considered as possible demographic control variables, as they were in the Bennet et al. (2005) study. A test of model fit (discrimination among the three groups) on the basis of the eight demographic predictors was conducted. A test of the model using the eight demographic predictors

against a constant-only model was statistically reliable, χ^2 (20, N= 264) 40.54, p <.01, indicating that the demographic predictors, as a set, reliably distinguished among those with intent to continue working in the same industry, switch industries, or retire (please refer to Appendix J containing complete multinomial logistic regression results). Nagelkerke R^2 = .173. The variance in employment intentions accounted for was small, however, with McFadden's p^2= .09. Prediction success was modest, with 8.2% of those intending to completely retire, 97.2% of those intending to continue working, and 0% of those choosing to switch industries predicted, for an overall success rate of 66.7%.

Appendix J displays regression coefficients, Wald statistics, odds ratios, 95% confidence intervals for odds ratios and classification tables for each of the eight predictors. According to the likelihood ratio tests and Wald criterion, three demographic variables reliably predicted employment intentions. Age predicted employment intent, z= 5.21, p < .05. Regarding age, those who were oldest were 1.11 times more likely to intend to retire than to engage in bridge employment. Furthermore, education level predicted employment intent, z= 6.88, p < .05. For

those with higher education, the odds of intending to retire were .67 less than to engage in bridge employment. Additionally, for those with higher education, the odds of intending to continue work were .78 less than to engage in bridge employment. Income predicted employment intent, z= 7.09, $p < .05$.Specifically, those who earned more income were 1.63 times more likely to intend to retire than to engage in bridge employment. Those with higher income were also 1.69 times more likely to intend to continue working than to engage in bridge employment. Using these three significant demographic predictors as controls, the job demands, job stereotype, and occupational self-efficacy variables were then introduced in the analysis as predictors in order to test the remaining hypotheses, as well as determine whether or not the added variables and the interaction of occupational self-efficacy variables provided reliable improvement in the model through more accurate classification. The self-perceived stereotype variable was chosen over the perceived stereotype variable to enter into the model. This was done somewhat arbitrarily as neither variable substantively changed findings in the model.

Upon the addition of the attitudinal variables, model fit further improved, χ^2 (18, $\underline{N}$ = 286) = 54.68, $\underline{p}$ < .01. Nagelkerke R^2 = .212. The variance in employment intentions accounted for improved only slightly, however, with an overall McFadden's p^2= .11. Prediction success also improved modestly, correctly identifying 19.2% of those intending to completely retire, 96.9% of those intending to continue working, and 1% of those choosing to switch industries predicted, for an overall success rate of 68.9%. Appendix J displays regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the nine predictors. Age predicted employment intent, $\underline{z}$= 11.11, $\underline{p}$ < .05. Regarding age, those who were oldest were 1.15 times more likely to intend to retire than to engage in bridge employment. Education level no longer predicted employment intent, $\underline{z}$= 2.31, $\underline{p}$ >.05. However, income still predicted employment intent, $\underline{z}$= 9.40, $\underline{p}$ < .05. Regarding income, those who earned more income were 1.60 times more likely to intend to retire than to engage in bridge employment. Those with higher income were also 1.49 times more likely to intend to continue working than intending to engage in bridge employment. The only attitudinal variable that significantly predicted

employment intent was the performance subscale of the occupational self-efficacy scale, $z = 9.40$, $p < .05$. Specifically, those with higher performance occupational self-efficacy were 5.21 times more likely to intend to engage in bridge employment than to retire.

Hypothesis 3: Multinomial Logistic Regression was also used to test Hypothesis 3 by monitoring significance levels, as well as beta weights for those in the continued employment intention category when compared to those in the bridge employment intention category. Hypothesis 3 stated all factors should be significant and that factors one (work performance ability) and three (social ability) should load with positive beta weights, while factor two should load with a negative beta weight (ability to learn and change). Hypothesis 3 was not supported in that none of the occupational self-efficacy factors loaded significantly for those in the continued employment intention category when paired against those who intended to switch industries.

Hypothesis 4: Multinomial Logistic Regression was used to answer Hypothesis 4 by monitoring significance levels as well as beta weights for those in the bridge employment intention category when compared to those intending to

retire. Hypothesis 4 stated all factors should be significant and factors two (ability to learn and change) and three (social ability) should load with positive beta weights and factor one (work performance ability) should load with a negative beta weight. Hypothesis 4 was not supported in that only the first factor (performance self-efficacy) significantly predicted bridge employment intentions and not in the predicted direction.

Hypothesis 5: Multinomial Logistic Regression was used to answer Hypothesis 5 by monitoring significance levels as well as beta weights for those in the retirement intention category versus the bridge employment intention category. Hypothesis 5 stated all occupational self-efficacy factors (work performance ability, ability to learn and change, and social ability) should be significant and at least two out of three should contain negative beta weights. Hypothesis 5 was only partially supported in that work performance ability was the only factor that significantly predicted retirement intentions.

Post Hoc Analysis

Income, age, and performance self-efficacy were found to have significant differences across

employment/retirement intentions. Following the procedures used by Bennet et al. (2005), a post-hoc ANOVA was conducted to analyze how group differences predict intention membership. It was found that age significantly predicted intention membership, $\underline{F}$ (2, 307) = 5.24, $\underline{p} < .01$, $\eta^2 = .05$. Additionally, performance self-efficacy also significantly predicted intention membership, $\underline{F}$ (2, 304) = 9.82, $\underline{p} < .01$, $\eta^2 = .05$. Overall, mean group differences in occupational self-efficacy performance were not large between the three employment intentions. However, those intending to retire had lower occupational self-efficacy performance (mean = 4.05) than those who intend to continue working (mean = 4.37) or those who intend to switch industries (mean = 4.37). Notice that there is no mean difference between the two employment intentions regarding occupational self-efficacy performance scores. Mean group differences in age between the three employment intentions were not large either. However, those intending to retire were the oldest (mean = 61.68), those intending to stay employed at their current industry were the next oldest (mean = 59.19), while those intending to switch industries were the youngest (mean = 58.32), on average.

Because equal intervals were not utilized in measuring the income variable, a Kruskal-Wallace H test was conducted in order to interpret how income levels predict intention membership. Income was found to significantly predicted intention membership χ^2 (2, $\underline{N}$ = 298) = 9.884, $\underline{p}$ < .01. Those intending to engage in bridge employment had the lowest income with a mean ranking of 115.05. Those intending to stop work had the next lowest income with a mean ranking of 143.861 Those intending to continue working had the highest mean ranking with 158.83. A Mann-Whitney U statistic was then computed to find out where among the three employment intentions the significant differences could be found. It was found that those who intended to continue working earned significantly higher income than those who intended to engage in bridge employment, $\underline{z}$= -3.11, $\underline{p}$ < .05.

CHAPTER FOUR

DISCUSSION

This study was conducted to examine how possible psychological antecedents to older workers' intentions to continue employment in the same job or industry, engage in bridge employment, or fully retire were related to one another and whether or not these psychological factors did in fact predict employment/retirement intentions. The ability to predict employment intentions among the aging baby boom generation has utility on an individual, organizational, and national level. Up to this point, few studies have examined how psychological variables play a role in the bridge employment (Shultz, 2003). In order to gain more insight into the link between psychological variables and work versus retirement intentions, a conceptual model of occupational self-efficacy's direct and indirect influence on bridge employment, continued employment, and retirement intentions was presented and assessed. Results from this study will now be interpreted in order to better understand the relationships among the psychological variables examined, the impact the variables

have on employment and retirement intentions, the limitations of the study, and the implications this study has on future research and practice.

Antecedents to Occupational Self-efficacy

The correlational analysis conducted was designed to examine the relationships between two psychological variables (self-perceived stereotypes and perceived job demands) and the three occupational self-efficacy subscales. It was found that there was a significant positive correlation between all three occupational self-efficacy subscales and a lack of negative self-perceived stereotypes. In other words, those respondents who had higher self-images of themselves regarding older worker stereotypes had higher beliefs in their ability to perform on the job. The association that self-perceived stereotypes had with the three occupational self-efficacy subscales was just as anticipated. As stated previously, stereotypes can be either positive or negative and therefore, can be harmful or beneficial. Although direct causation was not assessed in this study, changing self-perceived stereotypes would theoretically change one's occupational self-efficacy (Finkelstein & Farrel, in-press). As outlined in the

introduction, many of the negative stereotypes faced by older workers are inaccurate and the persistence of these inaccurate stereotypes can have a profound effect on the employee's self-efficacy, self-concept, and ultimately whether or not an older employee chooses to remain in an organization or the labor-force in general. Past research has failed to determined that there is any enduring relationship between age and a decrement in work performance (e.g., Salthouse & Maurer, 1996). The persistence of these self-perceived stereotypes demonstrates a perceived decrement in work performance ability, which may be only an illusion, but none-the-less may ultimately guide the intentions and actions of the older worker's career decisions. While this finding is interesting in itself, further statistical analyses in this study make the correlation between the performance self-efficacy subscale and self-perceived stereotypes of particular importance, which shall be further discussed in the implications section.

Similarly, it was found that a significant positive correlation existed between the performance self-efficacy scale and job demands. Although the relationship here was not as predicted, it mirrors Bandura's (1993) findings

regarding the idea that self-efficacy regulates the process in which individual's learn and master activities. In this manner, an individual may be successful in meeting work demands, which would increase their level of performance self-efficacy. Meeting performance demands would then result in an increasing upward spiral of self-efficacy, setting up a situation where the individual engages in more and more demanding work because of increased self-beliefs that this work can be continued reflecting on past accomplishments. Although this finding is also interesting in and of itself, further statistical analyses make this finding of particular importance as well. This finding will also be discussed in more detail in the implications section.

Also tested was the correlation between job demands and learning self-efficacy. It was found that a significant positive correlation existed between these two variables, indicating the more demanding the job occupied, the more the participant believed she would be able to change and learn technologies. This association was anticipated despite some of the literature surrounding the job demands of older workers. For example, Park (1992) and Murphy (1989) suggested older adults typically occupy positions

requiring very little resource demanding transition phases, which is how they maintain acceptable levels of work performance. The current finding demonstrates that many of the older workers in this study perceived they were in fact presently working in a highly dynamic environment and that they would be able to continue to evolve their skills to meet performance demands in these challenging and ever changing work environments. Thus, Park and Murphy's speculations regarding the workloads and performance ability of older individuals are not representative of this sample of older workers.

Antecedents to Employment Intentions

Support was found that one's occupational self-efficacy does in fact predict one's intentions to retire, remain in the same position, or engage in bridge employment. Specifically, it was found that older workers' performance self-efficacy regarding their current position is an important antecedent in predicting whether they intend to continue working in some capacity versus completely retire. The only antecedent that provided discrepancy between those wishing to continue employment in their current position versus intending to find some form

of bridge employment was their current income. However, age as well as performance self-efficacy predicted continued employment intentions in some capacity (either continued employment or bridge employment) when compared with full retirement intentions. Thus, while findings might not have served well to illuminate the different psychological predictors of bridge employment versus continued employment, findings from this study still have served to unite several hypotheses grounded in current literature. Additionally, the present findings may facilitate organizational and individual level interventions geared to better the work lives of older adults and better prepare them monetarily for full retirement as will be discussed in the implications section.

Theoretical Implications

From a theoretical standpoint, this project served to pit two competing perpectives against one another. Park (1994) suggested that the reason a decline in work performance is not related to age is that older employees typically work in situations where cognitive demand is limited. Salthouse and Maurer (1996) on the other hand, suggest that the older employee is not given easier work to

do, but instead relies on experience that compensates for age-related limitations and actually guides learning by chunking information. The OSEI scale was designed to gauge the work ability perceptions of older adults. One of the three major functions of the scale was the ability to learn and adapt to new technologies. The extent to which this factor was necessary as part of the scale was assessed in part by determining whether or not the factor added any predictability regarding employment intention. Additionally, the factor was assessed by determining the strength and direction of its relationship with job demands. The results of these findings build support against the maintenance hypothesis, which claims that the reason performance remains constant with age is because the work of older adults is composed of heavily rehearsed tasks in comparison to the dynamic nature of younger adults. Still, the multinomial logistic regression findings do not directly support Salthouse and Maurer's (1996) claims that many of the studies regarding age and performance have weaknesses and that age and performance are unrelated.

Had support been found that older individuals' work is primarily rote memorization where complex learning does not need to take place, this would support that at least for

those around typical retirement age, the efficacy measure may contain criterion contamination. This would be evidenced if the relationship between learning self-efficacy and job demands was small or virtually nonexistent. On the contrary, it was found that perceived job demands had a strong positive relationship to learning occupational self-efficacy (r = .40). The correlation between the two scores not only demonstrates empirically that as one's perceived job demands increase so does one's learning self-efficacy, but also provides evidence of construct validity for the learning self-efficacy measure. For example, the present findings suggest that 16% of the variance in perceived job demands of older workers is shared by one's ability to learn and adapt to new technologies.

The Multinomial Logistic Regression results are not as clear cut in building support against or for the maintenance hypothesis. For example, those with higher levels of performance self-efficacy are 5.21 times more likely to engage in bridge employment than retire. This finding suggests that one's perceived performance ability in their current job partially drives their intentions to

explore new types of jobs or new roles that they are currently unfamiliar with.

In order to face the barrier presented to the older worker in a scenario in which he decides to engage in bridge employment, one would most likely have to be confident in his ability to endure the training, learning, and readjusting necessary to occupy a new position. This finding is not the case though, as learning self-efficacy did not achieve significance among any of the employment/retirement intentions when included with the rest of the significant demographic and attitudinal variables. One explanation for this finding may be the high correlation that performance self-efficacy had with learning self-efficacy (r = .77). The overlapping variance may have caused a situation where learning self-efficacy alone in the model would have been a significant predictor. Because the psychological predictors were not orthogonal, only the strongest self-efficacy predictor was identified, performance self-efficacy. Thus, while learning self-efficacy appears to be important in meeting perceived job demands, it appears that it is primarily performance ability perceptions that drive the intentions to seek new

employment opportunities and not as much one's ability to learn and adapt on the job.

The results of this study overall build support against the maintenance hypothesis in that the relationship between learning and a variety of tasks differing in complexity play a role in the work lives of older adults. Further research is warranted however, in that these are perceptions of older workers and objective measures of workplace dynamics are not being assessed.

Applied Implications

The field of industrial and organizational psychology has mostly neglected the retirement work role transition compared to the fields of economics, gerontology, and sociology (Barnes-Farrell, 2003). While increases in health and wealth have become established antecedents in predicting early retirement, self-efficacy may serve to mediate the effect these variables have on the retirement decision. This study established that self-efficacy does in fact have an influence on retirement intentions. For example, those with higher levels of performance self-efficacy are 5.21 times more likely to engage in bridge employment than retire. As mentioned in the theoretical

implications, this finding suggests that one's perceived performance ability in their current job partially drives their intentions to explore new types of jobs or new roles that they are currently unfamiliar with.

The knowledge as to how perceived stereotypes and job demands are mediated by self-efficacy to influence career and retirement decisions will further expand current causal knowledge regarding the retirement process and give organizations direction as to how to encourage or discourage an individual's decision to retire. This section poses the conflicting roles that occupational self-efficacy and retirement self-efficacy (a variable that should be examined in future studies) may play in mediating the retirement decision and prescribes ways employees and organizations can play a role in gaining control over the decision to retire.

Workers are willing to engage in roles that allow them to maintain control over their lives. Individuals will prefer work or retirement depending on which allows them to maintain a sense of personal control over their lives (Barnes-Farrell, 2003). A sense of competency in one's career, work, and organization conducive to a sense of empowerment (along with additional income associated with

employment) will motivate employees to continue in their career. When individuals feel that they can no longer maintain control of their position due to conditions such as downsizing, perceived age discrimination, deterioration in health, or skill obsolescence, the employees may reevaluate their work role. If this sense of control is lost, employees may consider retirement to regain a sense of control (Barnes-Farrell, 2003).

This phenomenon is concurrent with findings that in general early retirement incentives (ERI) are more likely to be taken by poor performers who have less of a chance of getting a promotion or a raise and have lower expectations of deriving any further intrinsic satisfaction from their work, while higher performers are more likely to continue working (Feldman, 2003). Another study revealed that lower occupational attainment was associated with a younger planned retirement age (Adams, 1999). Thus, organizations can expect to lose a disproportionate number of poor performers relative to good performers to retirement, while loosing the good performers to bridge employment (Feldman, 2003). The current study mirrors these previous findings in that having perceived control over one's career (i.e., high performance OSE) regulates the option to intend to delay

retirement by either intending to stay in one's current career or intending to find a bridge job.

Alternatively, when one no longer feels that they can maintain control over their career, they may begin to consider planning for an earlier retirement. To compensate for this perceived reduction in OSE, one may seek to increase one's retirement self-efficacy (RSE). Should retirement provide an opportunity to restore and maintain a positive self-image, the individual will be much more likely to desire the role change. Retirement allows the retiree to play a much more central role as a family or community member, which would replace one's prior identity in the work, organization, or career role (Barnes-Farrell, 2003). Thus, one's decision to retire may be a function of the demands and rewards in both work and non-work roles (Barnes-Farrell, 2003). It has been found that pre-retirement counseling can facilitate adjustment to retirement by giving older workers accurate and specific information about pension benefits and other financial matters, thus reducing anxieties about financial security (Feldman, 2003). Counseling can also boost perceived control by suggesting that the soon to be retiree takes up new hobbies and find new social networks. These push and

pull factors that govern the retirement decision make it necessary to focus on the aspect of both OSE and RSE in future research.

Organizations and prospective retirees can utilize current and past findings to exert some control over the retirement process. Should organizations wish to decrease the workforce through retirement by increasing retirement self-efficacy, they can offer financial ERI, retirement counseling, bridge employment opportunities, and continued health insurance. Should they wish to preserve the employment of those around the age of retirement by increasing occupational self-efficacy, they may offer training, flexibility, positive feedback, and unbiased work practices relative to age. By adopting policies that combat the negative stereotyping of the older worker, the worker will feel more valued and accepted in the workplace, which would most likely result in longer employment. By providing equal opportunities for feedback, training, advancement, and social structures, the older employee can be on equal grounds with their younger counterparts. Based on the results of the current study, by giving older employees early-on opportunities to succeed, performance self-efficacy should gradually increase. From this point on,

older workers can increasingly be given more demanding roles in the workplace so long as perceived ability matches the demands of the job.

If future findings are consistent with this paper, employees would not only become more productive, but would also be more likely to desire to stay in the workforce, resulting quite possibly in less turnover among older workers. Although performance occupational self-efficacy did not predict continued employment intentions at the $\alpha = .05$ level, performance occupational self-efficacy was equivalent for those in both the bridge employment and continued employment intention groups, while less in the retirement intention group. The implication here is that while future studies may show that this specific sense of self-efficacy may guide one to stay in one's current position, the results from this study indicate that increasing one's performance self-efficacy may benefit society in addition to the specific organization. This study empirically demonstrates that higher amounts of performance self-efficacy lead one to be less likely to intend on retiring and more likely to extend paid employment in some capacity. In turn, longer employment will in part relieve Social Security and Medicare burdens,

thus benefiting society. These findings would also be quite valuable to employers who are looking for contingent workers and/or are currently shorthanded due to the scarcity of entry-level talent in the workforce.

Individuals can use this knowledge to choose which of these scenarios is more important to them and find pathways leading to their desired outcome. Performance self-efficacy was the strongest predictor found in governing the intentions of those considering bridge employment. If one values a professional career, one can choose the Protean role, thus proactively guarding against skill obsolescence and maximizing value by maintaining needed competencies as well as wisdom obtained through experience to maximize work performance (Sterns & Subich, 2003). By keeping on top of what knowledge, skills, and abilities are in demand in the workforce, older employees that find themselves in a downsizing organization will have the upper hand in the situation. In addition, a bridge position can bring a certain amount of added satisfaction, purpose, and income to those who might otherwise feel forced to withdraw from the workplace should they not view themselves as high performers. One who wishes to retire early may not need to focus as much on work performance so much as proactively

saving for the future, researching retirement plans, and at the same time building social networks and family ties critical to successful adjustment in their post-employment lives.

No studies have been conducted that intentionally reduce OSE or RSE, but current studies indicate a deficit in one may lead to an increase in the other (Barnes-Farrell, 2003). When one feels that control is lost on the job, this person will be more likely to try to regain control of their life by seriously planning on retiring. Although it is illegal to discriminate in treatment of employees age 40 and older, organizations induce retirement using push factors that most likely reduce OSE. It would be interesting to see if organizations reduce RSE through the penalizing of early retirement or by making health insurance unavailable while trying to increase OSE to maintain the aging workforce once workforce shortages are realized. Bridge employment may serve to increase OSE and RSE by giving the employee the ability to remain in the workforce, while generating a phased retirement. As far as maintaining self-efficacy throughout old age, bridge employment may be the most ethical and viable alternative.

Much of the contingent workforce is comprised of older workers who have exited their career jobs and are engaged in some type of bridge employment (Shultz, 2001). Contingent employees make up 25% of the workforce (Conference Board, 1995) and with the aging of the baby boom generation and continuous trends of organizational downsizing, this percentage will most likely increase. As mentioned in the introduction, those who worked as temporary employees voluntarily had higher levels of general satisfaction, commitment, satisfaction with pay, perceived fairness of compensation, satisfaction with their agency, and satisfaction with life as a temporary worker (Feldman, Doerpinghaus, & Turnley, 1994). Because contingent employment is becoming increasingly more prevalent and desirable among employers, it is critical that employers fill these positions with those looking for contingent rather than permanent work. In meeting that need, employers must remember that those who desire contingent employment are primarily individuals who have either finished or not yet begun their career jobs. The number of young adults who participate in the U.S. labor force has been declining since the early 1980s (Schooler, Caplan, & Oates, 1998). The current study depicts those

intending to seek bridge employment as top performers based on their perceived performance self-efficacy. Thus, older workers who intend to leave their full-time careers, but still work in some capacity should be prime candidates for these types of positions.

Contingent positions offer the "retired" employee the flexibility and leisure that is ultimately desired as well as the chance to utilize their talents in a productive way. Sterns and Subich (2002) suggest that the majority of older employees would be interested in working in some form after retirement. Should employers create the conditions in which flexible, part-time, or contractual work is available for retirees at market price, many veteran workers with top-notch knowledge, skills, abilities, and experience would be at their fingertips. This flexibility would enable leisure as demands placed on the retiree would be less than those put on a regular full-time worker. Prior studies have found that in addition to their qualifications, older workers have been shown to have fewer accidents, less voluntary absenteeism, lower turnover rates, and higher levels of job satisfaction, job involvement, job commitment, and Protestant work ethic (Rhodes, 1983; Salthouse & Maurer, 1996; Stagner, 1985; Sterns & Gray, 1999; Warr, 1994;

Weckerle & Shultz, 1999). The finding in the current study that those intending to find bridge employment are also those with the highest performance occupational self-efficacy implies that employers would be well served to accommodate the needs of older workers.

Limitations

The present study has several limitations that need to be mentioned. First, the fact that employment/retirement intentions were assessed and not actual employment/retirement actions must be addressed. Second, the fact that associations found between the "antecedents" to the three subscales of occupational self-efficacy are correlational and not causation based. A third primary limitation addressed in this report is that it is purely self-report in nature. While the results of the study have clear-cut descriptive and prescriptive use for further research and employee development, these limitations must be addressed.

It is necessary to mention that it was retirement intentions that were assessed in this study and not actual retirement behaviors. Intentions may or may not accurately predict actual retirement or bridge employment. For

example, researchers at the Upjohn Institute for Employment Research (2004) found that those who plan to stop working altogether generally do, but those who wish to work less hours or change jobs are far less likely to act on these intentions. Many who find themselves in the situation where they want to change positions never make plans to actually do so, which creates an environment where they are far less likely to ever take action. In addition, even though they may intend to follow a certain late career path, their current employer may be unwilling to accommodate them or the economy may change for the worse. Thus, future research in this area would benefit from utilizing longitudinal studies to examine the psychological antecedents of employment and retirement decisions at older ages, in addition to actual behaviors among the older workforce.

In discerning the relationships between both the job demands and self-perceived stereotype variables with the three occupational self-efficacy scales, causation was not assessed. While it makes sense that one would be more confident in her ability to get work done reflecting on demanding work completed in the past, that causation was never directly assessed. In questionnaire format, the relationship between the variables is purely correlational.

It could be that one's self-efficacy set limits on job demands from the outset of employment. It could also be that the relationship between job demands and occupational self-efficacy is somewhat recursive. That is, any change in one may have influence on the other making causation hard to detect. Similarly, while intuitively it makes sense that self-perceived stereotypes would impact one's perceived ability on the job, it makes just as much sense that one's perceived ability on the job would impact the older worker's perception of himself.

Lastly, is the issue that the method used by this study was strictly self-report. While self-report was desired in regards to perceived stereotypes and occupational self-efficacy, the job demands scale was highly susceptible to attribution error and self-serving bias. Although, self-report appraisal has a moderate correlation with actual performance (Holzbach, 1978; Meyer, 1980), fundamental errors are found with regards to attribution error and self-serving bias (Harvey & Weary, 1981). The fact that the participants in the study had scores on the job demands scale that mirrored participants in the study by Dean and Snell (1991) implies that job demands are comparable for the two samples. While this

could be true, it could be that this sample, both samples, or neither sample exaggerated regarding the variety and complexity of their positions. Further post-hoc investigation in the current study depicts that those who completed the survey using the online method reported higher job demands (mean = 4.71) than those who completed the survey using the paper and pencil method (mean = 4.13), F (1, 319) = 24.42, p <.01, η^2 = .07. This finding helps to validate the current studies job demand scores as those who completed the survey via the Internet may very well occupy jobs higher in complexity than those who did not. Using self-report in this manner is desirable for a perceived/subjective measurement, but may not depict the objective measure desirable to build sufficient support against the maintenance hypothesis.

Future Research

Performance self-efficacy is a domain-specific state variable, meaning that unlike more enduring personality traits, it is malleable and thus there are interventions that can be undertaken in order to change ability perceptions. Because higher amounts of performance self-efficacy lead to higher odds of intending to stay in the

workforce, longitudinal studies can be conducted that manipulate occupational self-efficacy by providing older employees training, support, and opportunities to succeed. This should in theory, increase one's occupational self-efficacy, which in turn will extend the work lives of older individuals.

Quasi-experimental studies can be conducted where causation can be examined in an applied setting as well. For instance, disproving negative stereotypes regarding an older individual's ability to get the job done by setting up training programs designed to facilitate improvement of current skills, should not only increase performance, but also increase performance self-efficacy in general, which would also facilitate one's tendency to desire to stay in the workplace whereas they may have otherwise have felt compelled to retire. From these findings, potential benefits await employees, organizations, and the country as a whole in that a step has been made towards the better understanding of the antecedents to the employment and retirement intentions of America's aging workforce.

It is necessary that future researchers interested in bridge employment utilize large longitudinal data sets, while taking a multilevel approach to studying bridge

employment across the older workforce population. This study looked at demographic and attitudinal measures and incorporated a brief glimpse of family and organizational variables across a sample that was mainly Caucasian. Shultz (2003) states that retirement is a process and not merely an event, meaning that a repeated measure study is necessary to gain full insight into this phenomenon. While this study incorporates more than purely economic variables and offers a prescriptive path for employees and employers to take to extend employment of older workers should they wish, more individual, group, family, organizational, and society-wide factors should be incorporated into future studies (Shultz, 2003). For example, future studies wishing to investigate the baby boom cohort must do so across SES, gender, and ethnicity as there may very well be as much variance within this cohort as between it and others. Thus, while this study makes further advancements in bridge employment literature, subsequent studies should encompass larger and more diverse samples in addition to further incorporating additional psychological variables as possible in order to continue shedding light on the retirement process.

In conclusion, this study makes a significant contribution to current literature on aging workforce issues by examining the predictors of bridge employment intentions, continued employment, and full retirement. Although a robust predictor distinguishing one's intentions to choose bridge employment versus continued employment was not found, the present findings bring optimism to the idea that organizations can use performance self-efficacy to retain the graying workforce at a time when well-qualified employees are hard to find. Similarly, government level interventions where job training is available to those who may be out of work may be put in place to not only teach valuable skills, but also to build up performance self-efficacy on the job. These kind of interventions may lead the way to hedge against; the shortage of talent in the workplace, diminishing Social Security and Medicare resources, and the poverty rate among older individuals.

APPENDIX A

A CONCEPTUAL MODEL OF THE BRIDGE MODEL OF OCCUPATIONAL SELF-EFFICACY

Figure 1- Conceptual Model of Occupational Self-Efficacy's Influence on Bridge Employment, Continued Employment, and Retirement Intentions

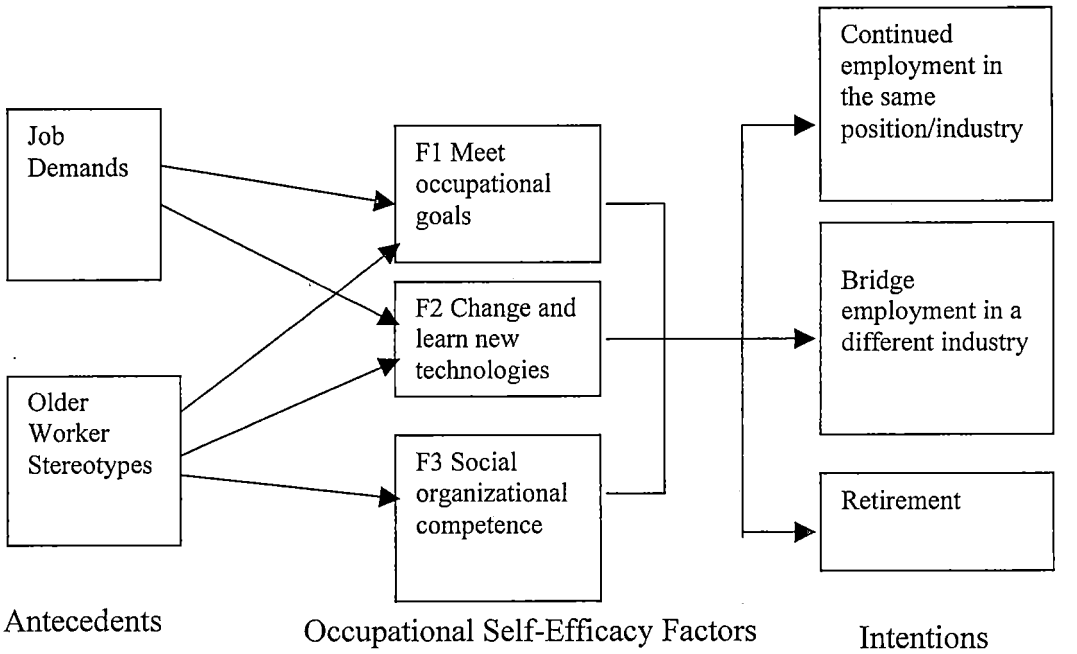


Figure 2- Predicted Relationships among Job Demands, Stereotypes and Occupational Self-Efficacy

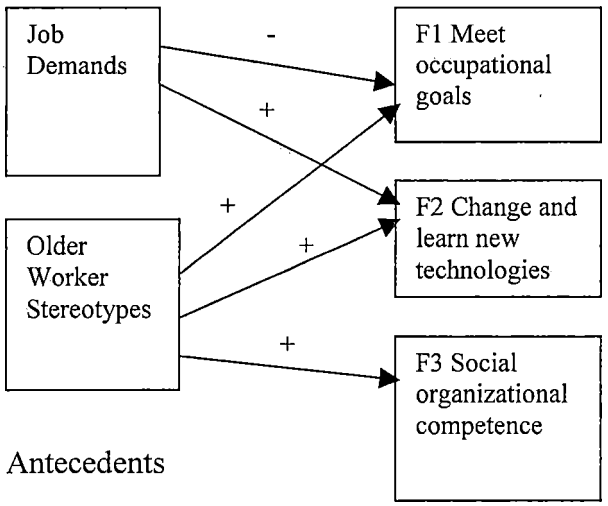


Figure 3- Occupational Self-Efficacy Leading to Continued Employment Intentions

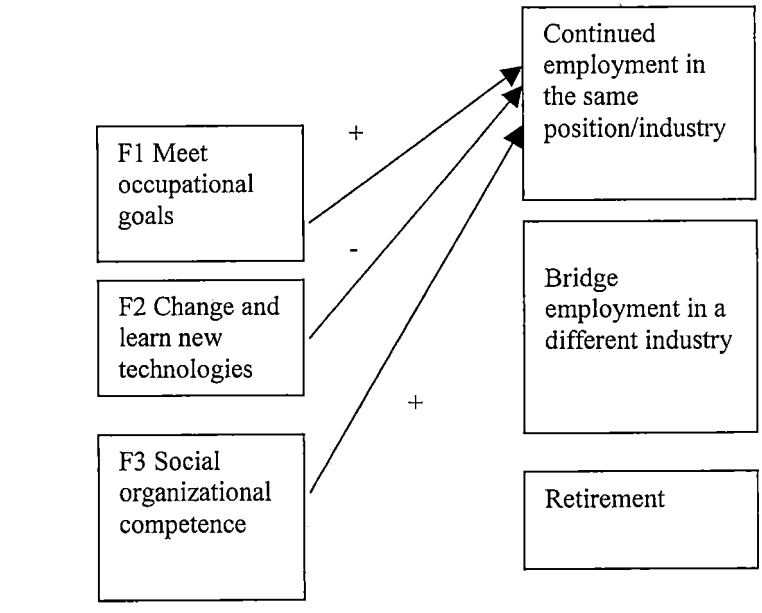


Figure 4- Occupational Self-Efficacy Leading to Industry Change (i.e., Bridge Employment) Intentions

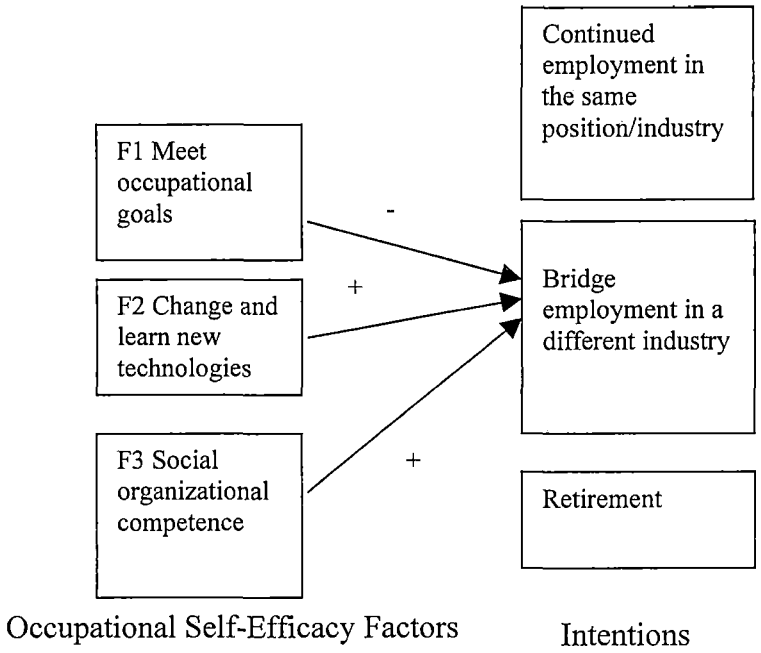
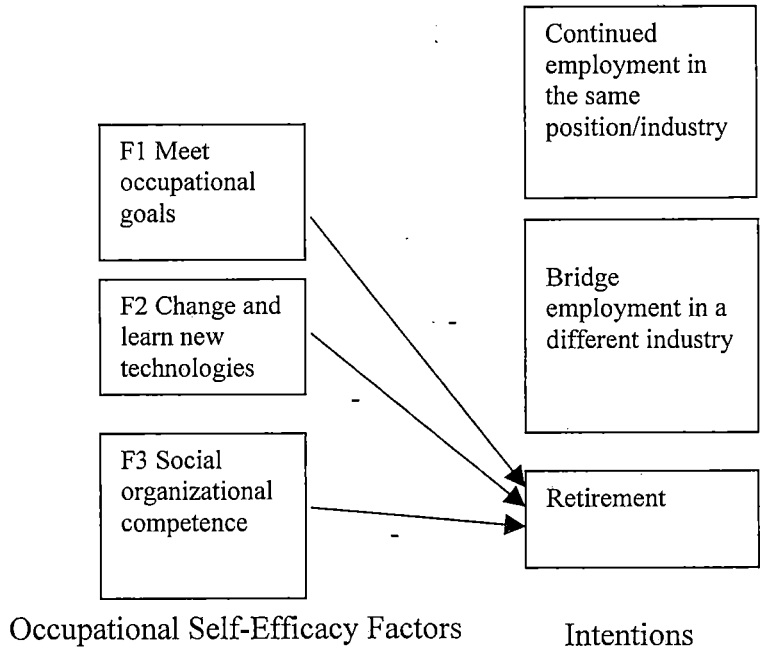


Figure 5- Occupational Self-Efficacy Leading to Retirement Intentions



APPENDIX B

DISCUSSION BOARDS WHERE PARTICIPATION WAS SOLICITED

Internet based discussion boards used to solicit participation in the survey were at the following web addresses:

1. BabyBoomers@groups.msn.com
2. LifesatripEnjoyit@groups.msn.com
3. PEERS50s@groups.msn.com
4. online96seniors@groups.msn.com
5. HellsGeriatrics@yahoogroups.com
6. craigslist.org (over 50's club)
7. aginghipsters.com
8. silversurfers.net
9. 45-65.com
10. 50connect.co.uk
11. ageconcern.org
12. age-net.co.uk
13. babyboomerbistro.org
14. wiredseniors.com
15. boomersint.org
16. www.seniornet.org

APPENDIX C

DEMOGRAPHIC INFORMATION AND ATTITUDINAL VARIABLE SCORES

Summary of Demographics for All Samples

	Paper and Pencil N= 137	Electronic N= 186	Total N= 323
Gender			
Male	43.1%	39.2%	40.9%
Female	54.9%	60.8%	59.1%
Health			
Very good	24.8%	24.2%	24.5%
Better than average	30.7%	35.5%	33.4%
Average	38.0%	32.3%	34.7%
Worse than average	5.1%	6.5%	5.9%
Poor	1.5%	1.1%	1.2%
Marital Status			
Single/Never Married	5.1%	5.9%	4.3%
Married	65.7%	55.9%	5.6%
Divorced	17.5%	24.7%	60.1%
Widowed	8.8%	7.0%	21.7%
Other	2.2%	5.9%	7.7%
Missing	.7%	.5%	0.3%
Spouse's Employment			
Employed full-time	29.2%	33.9%	31.9%
Employed part-time	16.8%	10.8%	13.3%
Retired	19.0%	13.4%	15.8%
N/A	35.0%	30.6%	32.5%
Income			
Under $25,000	10.2%	7.5%	8.7%
25,000-49,999	19.7%	18.8%	19.2%
50,000-74,999	21.2%	19.9%	20.4%
$75,000-$99,000	18.2%	19.9%	19.2%
$100,000-$124,999	9.5%	6.5%	7.7%
$125,000-149,999	8.8%	7.5%	8.0%
$150,000 and up	8.8%	15.6%	12.7%
Missing	3.6%	4.3%	4.0%

	Paper and Pencil N= 137	Electronic N= 186	Total N= 323
Race			
American Indian or Alaskan Native	1.5%	1.1%	1.2%
Asian	4.4%	1.1%	2.5%
Black or African American	9.5%	1.6%	5.0%
Hispanic or Latino	21.2%	0.5%	9.3%
Native Hawaiian or Pacific Islander	0.7%	0%	0.3%
White	61.3%	92.5%	79.3%
Other	1.5%	1.6%	1.5%
Industry			
Manufacturing	5.8%	3.2%	4.3%
Transportation	5.1%	2.7%	3.7%
Utilities	2.2%	0.5%	1.2%
Wholesale/Retail Trade	11.7%	2.2%	6.2%
Finance	9.5%	1.6%	5.0%
Insurance	0.7%	5.4%	3.4%
Service	15.3%	12.4%	13.6%
Health	18.2%	15.1%	16.4%
Real Estate	5.1%	1.6%	3.1%
Education Services	11.7%	17.7%	15.2%
Government/Military	2.2%	4.8%	3.7%
Construction	2.2%	2.2%	2.2%
Technology	2.2%	5.4%	4.0%
Other	8.0%	24.7%	17.6%
Education			
Less than high school	6.6%	1.1%	3.4%
High school graduate	13.9%	9.7%	11.5%
Some College	27.0%	22.6%	24.5%
Associate's degree	13.1%	10.2%	11.5%
College graduate	21.9%	21.5%	21.7%
Some post graduate	7.3%	10.8%	9.3%
Post graduate degree	10.2%	23.7%	18.0%
Children Under 18			
0	79.6%	82.3%	81.1%
1	7.3%	8.6%	8.0%
2	9.5%	3.8%	6.2%
3	0.7%	0%	0.3%
4	0.7%	5.8%	0.3%

Attitudinal Variable Mean Scores for All Samples

	Paper and Pencil N= 137	Electronic N= 186	Total N= 323
Self-perception stereotype	3.20	3.12	3.15
Perceived worker stereotype	4.06	4.29	4.19
Personal efficacy beliefs scale	2.24	1.81	1.99
Job complexity variety scale	4.13	4.71	4.46
Performance self-efficacy	4.21	4.36	4.30
Social self-efficacy	4.11	4.17	4.15
Learning self-efficacy	3.78	3.89	3.84
Total occupational self-efficacy	4.05	4.17	4.12
Intention			
Stop work altogether	31	31	62
Continue working	78	126	204
Change industry	16	28	44
Missing	12	1	13

APPENDIX D

QUESTIONNAIRE

Section A

Using the following scale, mark one response for each statement:

5 – Better than most
4 - Slightly better than most
3 – Average
2 – Slightly worse than most
1 – Worse than most

Please rate yourself on each item compared to the average worker:

1. Ability to control quality of my work (f1)	1 2 3 4 5
2. Ability to meet my work goals (f1)	1 2 3 4 5
3. Ability to plan effectively (f1)	1 2 3 4 5
4. Relevant experience (f1)	1 2 3 4 5
5. Perseverance on difficult jobs (f1)	1 2 3 4 5
6. Pride in a job well done (f1)	1 2 3 4 5
7. Dependability (f1)	1 2 3 4 5
8. Contribution to the company (f1)	1 2 3 4 5
9. Current skills (f1)	1 2 3 4 5
10. Job safety habits/record (f1)	1 2 3 4 5
11. Ability to communicate clearly on the job (f1)	1 2 3 4 5
12. Energy level (endurance) (f1)	1 2 3 4 5
13. Ability to be retrained for new jobs (f2)	1 2 3 4 5
14. Interest in further career growth (f2)	1 2 3 4 5
15. Ability to adapt to changes in work group (f2)	1 2 3 4 5
16. Ability to handle complex jobs (f2)	1 2 3 4 5
17. Efforts to continually learn more about my job (f2)	1 2 3 4 5
18. Ability to remember job details (f2)	1 2 3 4 5
19. Ability to learn from experienced workers (f2)	1 2 3 4 5
20. Knowledge of the latest technologies (f2)	1 2 3 4 5
21. Ability to deal with people (f3)	1 2 3 4 5
22. Ability to support co-workers with personal problems (f3)	1 2 3 4 5
23. Ability to get along with "difficult" co-workers (f3)	1 2 3 4 5
24. Co-workers can trust me(f3)	1 2 3 4 5
25. Knowing how to get cooperation from other departments, co-workers (f3)	1 2 3 4 5
26. Judgment	1 2 3 4 5
27. Knowing where to go in company for most kinds of help (f3)	1 2 3 4 5
28. Ability to teach/manage others (f3)	1 2 3 4 5
29. Ability to help co-workers with job-related problems (f3)	1 2 3 4 5

(f1) Indicates item comes from work performance component
(f2) Indicates item comes from learning self-efficacy component
(f3) Indicates item comes from organization/social competence component

Section B

Stereotype Scale in German

Im folgenden möchten wir Sie für eine Reihe von Eigenschaften bitten, einzuschätzen wie bedeutsam die genannten Eigenschaften für das Bild sind, das Sie von sich selbst haben. Es werden jeweils zwei gegensätzliche Merkmale gegenübergestellt.

So sehe ich mich selbst

1.	anpassungsfähig	5	4	3	2	1	0	1	2	3	4	5	starr, unflexibel
2.	zerstreut	5	4	3	2	1	0	1	2	3	4	5	konzentriert
3.	energisch	5	4	3	2	1	0	1	2	3	4	5	zögernd
4.	geduldig	5	4	3	2	1	0	1	2	3	4	5	ungeduldig
5.	einflußreich	5	4	3	2	1	0	1	2	3	4	5	machtlos
6.	kleinlich, pedantisch	5	4	3	2	1	0	1	2	3	4	5	großzügig
7.	ängstlich	5	4	3	2	1	0	1	2	3	4	5	mutig
8.	optimistisch	5	4	3	2	1	0	1	2	3	4	5	pessimistisch
9.	unruhig	5	4	3	2	1	0	1	2	3	4	5	ruhig
10.	selbstsicher	5	4	3	2	1	0	1	2	3	4	5	unsicher
11.	tatkräftig	5	4	3	2	1	0	1	2	3	4	5	unentschlossen
12.	unternehmungslustig	5	4	3	2	1	0	1	2	3	4	5	träge
13.	vergeßlich	5	4	3	2	1	0	1	2	3	4	5	gedächtnisstark
14.	zurückhaltend	5	4	3	2	1	0	1	2	3	4	5	aufdringlich
15.	unvernünftig	5	4	3	2	1	0	1	2	3	4	5	vernünftig
16.	verständnisvoll	5	4	3	2	1	0	1	2	3	4	5	verständnislos
17.	vorsichtig	5	4	3	2	1	0	1	2	3	4	5	unvorsichtig
18.	lebensklug, weise	5	4	3	2	1	0	1	2	3	4	5	naiv
19.	zuversichtlich	5	4	3	2	1	0	1	2	3	4	5	verzagt
20.	kraftlos, erschöpft	5	4	3	2	1	0	1	2	3	4	5	kraftvoll

21.	gelassen	5	4	3	2	1	0	1	2	3	4	5	aufgeregt
22.	belastbar	5	4	3	2	1	0	1	2	3	4	5	nicht belastbar
23.	beliebt	5	4	3	2	1	0	1	2	3	4	5	unbeliebt
24.	geistesgegenwärtig	5	4	3	2	1	0	1	2	3	4	5	langsam
25.	gebrechlich	5	4	3	2	1	0	1	2	3	4	5	robust
26.	reif	5	4	3	2	1	0	1	2	3	4	5	unreif
27.	jugendlich, frisch	5	4	3	2	1	0	1	2	3	4	5	alt, verbraucht
28.	einsam, abgesondert	5	4	3	2	1	0	1	2	3	4	5	integriert
29.	hinfällig, krank	5	4	3	2	1	0	1	2	3	4	5	gesund
30.	scharfsinnig	5	4	3	2	1	0	1	2	3	4	5	geistig unbeweglich
31.	tolerant	5	4	3	2	1	0	1	2	3	4	5	streng
32.	attraktiv, anziehend	5	4	3	2	1	0	1	2	3	4	5	unattraktiv

Stereotype scale in English

On the following pages you will find several different personality traits. Every personality trait will be described with two words. The meaning of one word will be the opposite of the other one. How do you see yourself?

1	Flexible	4	3	2	1	0	1	2	3	4	Rigid, Inflexible
2	Absent-minded	4	3	2	1	0	1	2	3	4	Focused
3	Energetic, Forceful	4	3	2	1	0	1	2	3	4	Hesitant, Undecided
4	Patient	4	3	2	1	0	1	2	3	4	Impatient
5	Influential	4	3	2	1	0	1	2	3	4	Powerless
6	Narrow-minded	4	3	2	1	0	1	2	3	4	Open-minded
7	Fearful	4	3	2	1	0	1	2	3	4	Courageous
8	Optimistic	4	3	2	1	0	1	2	3	4	Pessimistic
9	Restless	4	3	2	1	0	1	2	3	4	Calm
10	Self-Confident	4	3	2	1	0	1	2	3	4	Insecure
11	Decisive	4	3	2	1	0	1	2	3	4	Indecisive
12	Adventurous	4	3	2	1	0	1	2	3	4	Lethargic
13	Forgetful	4	3	2	1	0	1	2	3	4	Cognizant

14	Restrained	4	3	2	1	0	1	2	3	4	Pushy
15	Irrational	4	3	2	1	0	1	2	3	4	Rational
16	Understanding	4	3	2	1	0	1	2	3	4	Unsympathetic
17	Careful	4	3	2	1	0	1	2	3	4	Careless
18	Wise	4	3	2	1	0	1	2	3	4	Naïve
19	Confident	4	3	2	1	0	1	2	3	4	Timid
20	Weak	4	3	2	1	0	1	2	3	4	Powerful
21	Relaxed	4	3	2	1	0	1	2	3	4	Nervous
22	Able to cope	4	3	2	1	0	1	2	3	4	Unable to cope
23	Popular	4	3	2	1	0	1	2	3	4	Unpopular
24	Mentally Quick	4	3	2	1	0	1	2	3	4	Mentally Slow
25	Frail	4	3	2	1	0	1	2	3	4	Solid
26	Mature	4	3	2	1	0	1	2	3	4	Immature
27	Youthful	4	3	2	1	0	1	2	3	4	Old
28	Isolated	4	3	2	1	0	1	2	3	4	Integrated
29	Sickly	4	3	2	1	0	1	2	3	4	Healthy
30	Flexible	4	3	2	1	0	1	2	3	4	Inflexible
31	Tolerant	4	3	2	1	0	1	2	3	4	Strict
32	Attractive	4	3	2	1	0	1	2	3	4	Unattractive

How do you think your coworkers see you?

1	Flexible	4	3	2	1	0	1	2	3	4	Rigid, Inflexible
2	Absent-minded	4	3	2	1	0	1	2	3	4	Focused
3	Energetic, Forceful	4	3	2	1	0	1	2	3	4	Hesitant, Undecided
4	Patient	4	3	2	1	0	1	2	3	4	Impatient
5	Influential	4	3	2	1	0	1	2	3	4	Powerless
6	Narrow-minded	4	3	2	1	0	1	2	3	4	Open-minded
7	Fearful	4	3	2	1	0	1	2	3	4	Courageous
8	Optimistic	4	3	2	1	0	1	2	3	4	Pessimistic
9	Restless	4	3	2	1	0	1	2	3	4	Calm
10	Self-Confident	4	3	2	1	0	1	2	3	4	Insecure
11	Decisive	4	3	2	1	0	1	2	3	4	Indecisive
12	Adventurous	4	3	2	1	0	1	2	3	4	Lethargic
13	Forgetful	4	3	2	1	0	1	2	3	4	Cognizant
14	Restrained	4	3	2	1	0	1	2	3	4	Pushy
15	Irrational	4	3	2	1	0	1	2	3	4	Rational
16	Understanding	4	3	2	1	0	1	2	3	4	Unsympathetic
17	Careful	4	3	2	1	0	1	2	3	4	Careless

18	Wise	4	3	2	1	0	1	2	3	4	Naïve
19	Confident	4	3	2	1	0	1	2	3	4	Timid
20	Weak	4	3	2	1	0	1	2	3	4	Powerful
21	Relaxed	4	3	2	1	0	1	2	3	4	Nervous
22	Able to cope	4	3	2	1	0	1	2	3	4	Unable to cope
23	Popular	4	3	2	1	0	1	2	3	4	Unpopular
24	Mentally Quick	4	3	2	1	0	1	2	3	4	Mentally Slow
25	Frail	4	3	2	1	0	1	2	3	4	Solid
26	Mature	4	3	2	1	0	1	2	3	4	Immature
27	Youthful	4	3	2	1	0	1	2	3	4	Old
28	Isolated	4	3	2	1	0	1	2	3	4	Integrated
29	Sickly	4	3	2	1	0	1	2	3	4	Healthy
30	Flexible	4	3	2	1	0	1	2	3	4	Inflexible
31	Tolerant	4	3	2	1	0	1	2	3	4	Strict
32	Attractive	4	3	2	1	0	1	2	3	4	Unattractive

Section C

Job Demands Scale

The following anchors will be used:

7 – A great deal
4 - A moderate amount
1 – Very little

1.	How much technical knowledge do the jobs in this unit require? (c)	1 2 3 4 5 6 7
2.	To what extent do the jobs involve solving problems? (c)	1 2 3 4 5 6 7
3.	How complicated are the jobs in this unit? (c)	1 2 3 4 5 6 7
4.	How much variety in tasks, clients, or things do members of your work unit generally encounter in a working day? (v)	1 2 3 4 5 6 7
5.	How routine is the work of members in your unit? (v)	1 2 3 4 5 6 7
6.	How much opportunity do members have in this unit to do a number of different things? (v)	1 2 3 4 5 6 7
7.	How similar are the tasks members perform in a typical day? (v)	1 2 3 4 5 6 7
8.	People in this unit do the same job in the same way most of the time. (v)	1 2 3 4 5 6 7
9.	In doing their jobs from day to day, unit members generally have to adopt different methods or procedures. (v)	1 2 3 4 5 6 7
10.	There are different types or kinds of work to do every day in this job. (v)	1 2 3 4 5 6 7

(c) indicates that the item comes from the complexity component (k=3)
(v) indicates that the item comes from the variety component (k=7)

Section D

Personal Efficacy Beliefs Scale

Think about your ability to do the tasks required by your job. When answering the following questions, answer in reference to your own personal work skills and ability to perform your job. Respond with "SA" for "strongly agree," "A" for "agree," "AS" for "agree somewhat," "DS" for "disagree somewhat," "D" for "disagree," and "SD" for "strongly disagree."

1. I have confidence in my ability to do my job.
*2. There are some tasks required by my job that I cannot do well.
*3. When my performance is poor, it is due to my lack of ability.
*4. I doubt my ability to do my job.
5. I have all the skills needed to perform my job very well.
*6. Most people in my line of work can do this job better than I can.
7. I am an expert at my job.
*8. My future in this job is limited because of my lack of skills.
9. I am very proud of my job skills and abilities.
*10. I feel threatened when others watch me work.

* Indicates item is reversed scored
Employment/Retirement Question:

Are you currently planning to stop work altogether, continue to work in the same job/industry, or continue to work, but in a different industry?

a. Stop work altogether
b. Continue work in the same job/industry
c. Continue work in a different industry

Section E

Demographic Questions:

What is your age?

What is your gender?
a. Male
b. Female

What is your annual combined household income?
a. Under $25,000
b. $25,000-$49,999

c. $50,000-$74,999
d. $75,00-$99,999
e. $100,000-$124,999
f. $125,00-149,000
g. $150,000 and up

Please indicate your highest level of education completed.
a. Less than high school
b. High school graduate
c. Some college
d. College graduate
e. Some post graduate
f. Post graduate degree

How many children are living in your household?

If you have a spouse, is he/she
a. Employed full-time
b. Employed part-time
c. Retired
d. N/A

Which of the following best describes your health:
a. Very good
b. Better than average
c. Average
d. Worse than average
e. Poor

What is your ethnicity?
a. American Indian or Alaskan Native
b. Asian
c. Black or African American
d. Hispanic or Latino
e. Native Hawaiian or Pacific Islander
f. White
g. Other

Please identify the business and/or industry of your current job:
a. Manufacturing
b. Transportation
c. Utilities
d. Wholesale/Retail Trade

e. Finance
f. Insurance
g, Service
h. Health
i. Real Estate
j. Education Services
k. Government/Military
l. Construction
m. Technology
n. Other_____

APPENDIX E

INFORMED CONSENT PAGE AND EXPLANATION STATEMENT

Current Employment and Intention Measure

INFORMED CONSENT

You are invited to participate in a study designed to understand and describe the employment/retirement intentions of the baby boom generation. This study is being conducted by Alex Brody under the supervision of Dr. Kenneth S. Shultz, Professor of Psychology. This study has been approved by the Department of Psychology Institutional Review Board Sub-Committee of the California State University, San Bernardino, and a copy of the official Psychology IRB stamp of approval should appear somewhere on this page.

In this study you will be asked to respond to a survey. The survey will take approximately 10 minutes to complete. All of your responses will be held in the strictest of confidence by the researchers. All data will be reported in group form only. Since no identifying information is collected on the survey, all your responses will be completely anonymous. Results from this study will be available from Dr Shultz (909)-880-5570 or via email at KShultz@csusb.edu after July 1, 2005.

Your participation in this study is totally voluntary. You are free not to answer any question and withdraw at any time during this study without penalty. This study involves no risks beyond those of everyday life, nor any direct benefits to you as an individual. When you have completed the survey, you will receive a debriefing statement describing the study in more detail. In order to ensure the validity of the study, we ask that you not discuss this study with other participants.

If you have any questions or concerns about this study, please feel free to contact Dr. Kenneth S. Shultz at (909) 880-5570 or via email at Kshultz@csusb.edu.

By clicking continue, I acknowledge that I have been informed of, and that I understand, the nature and purpose of this study, that I freely consent to participate, and that at the conclusion of the study, I may ask for additional explanation regarding the study. I also acknowledge that I am at least 18 years of age.

Current Employment and Intention Measure

Explanation Statement

The study you have just completed was designed to investigate if one's self-evaluations regarding his/her abilities to perform at work and one's current employment situation predict the intentions of those of and around typical retirement age to maintain their current employment, seek employment in a different position or industry, or fully retire. Your response will be compiled with the responses of others and analyzed in order to help determine whether or not certain beliefs in one's performance, learning, and social abilities provide direction for future employment intentions with older workers.

Thank you for your participation in this study. If you have any questions about the study, please feel free to contact Dr Kenneth S. Shultz. If you would like to obtain a copy of the group results of this study, please contact Dr Shultz at (909)-880-5570 or via email at Kshultz@csusb.edu after July 1, 2005.

APPENDIX F

SKEWNESS AND KURTOSIS STATISTICS

Personal Efficacy Beliefs Scale

N		Before Outlier Deletion	After Outlier Deletion
	Valid	323	318
	Missing	0	5
Skewness		1.49	.94
Std. Error of Skewness		.14	.14
Kurtosis		3.16	.68
Std. Error of Kurtosis		.27	.27

Performance Occupational Self-Efficacy Scale

N		Before Outlier Deletion	After Outlier Deletion
	Valid	322	320
	Missing	1	3
Skewness		-1.07	-.67
Std. Error of Skewness		.14	.14
Kurtosis		1.91	-.23
Std. Error of Kurtosis		.27	.27

Learning Occupational Self-Efficacy Scale

N		Before Outlier	After Outlier

		Deletion	Deletion
	Valid	322	321
	Missing	1	2
Skewness		.17	-.22
Std. Error of Skewness		.14	.14
Kurtosis		1.03	-.67
Std. Error of Kurtosis		.27	.27

Social Occupational Self-Efficacy Scale

N		Before Outlier Deletion	After Outlier Deletion
	Valid	322	321
	Missing	1	2
Skewness		-.59	-.53
Std. Error of Skewness		.14	.14
Kurtosis		-.3	-.5
Std. Error of Kurtosis		.27	.27

Personal Efficacy Beliefs Scale

N		Before Transformation	After Transformation

	Valid	318	318
	Missing	5	5
Skewness		.94	.18
Std. Error of Skewness		.14	.14
Kurtosis		.68	-.71
Std. Error of Kurtosis		.27	.27

Performance Occupational Self-Efficacy Scale

N		Before Transformation	After Transformation
	Valid	320	320
	Missing	3	3
Skewness		-.67	.40
Std. Error of Skewness		.14	.14
Kurtosis		-.23	-.63
Std. Error of Kurtosis		.27	.27

Social Occupational Self-Efficacy Scale

N		Before Transformation	After Transformation
	Valid	321	320

	Missing	2	3
Skewness		-.53	.25
Std. Error of Skewness		.14	.14
Kurtosis		-.5	-.86
Std. Error of Kurtosis		.27	.27

APPENDIX G

SUMMARY OF HYPOTHESES

Hypothesis 1. The more positive the perceived stereotypes of older workers the more positive the ratings should be on the three components (achieving occupational goals, learning new technologies, and organizational/social competence) of the occupational self-efficacy scale (see Appendix A, Figure 2).

Hypothesis 2a. Participants will score higher on the first component of occupational self-efficacy (belief in their ability to meet occupational goals, persevere, contribute productively, and be a safe worker) when they occupy positions in a static environment as compared to working in a dynamic environment (see Appendix A, Figure 2).

Hypothesis 2b. Participants will score lower on the second component of occupational self-efficacy (belief in their ability to change and learn new technologies) when they occupy positions in a static environment as compared to working in a dynamic environment (see Appendix A, Figure 2).

Hypothesis 3. Those high in work performance (F1) and organizational/social competence (F3) but low in learning self-efficacy (F2) most likely occupy maintenance jobs that are static in nature. They will continue in their current employment up until full retirement because their position matches their current level of abilities (see Appendix A, Figure 3).

Hypothesis 4. Those low in work performance (F1), but high in learning self-efficacy (F2) and organization/social competence (F3) will intend to pursue different careers and retraining in the pursuit of a seeking a new position (see Appendix A, Figure 4).

Hypothesis 5. Participants who score low on all factors, or even two out of three of the occupational self-efficacy scales, will feel forced to retire, which should reflect their

intentions. An employee who does not perceive they are meeting occupational goals and believes they cannot change and learn new technologies, nor relate to coworkers in a sociable manner, would probably intend to leave the workforce entirely as well (see Appendix A, Figure 5).

APPENDIX H

STATISTICAL ANALYSES FOR HYPOTHESES

Hypothesis	Variables Examined	Analysis
1	Self-Perceived Stereotypes, Learning Occupational Self-Efficacy, Social Occupational Self-Efficacy, Working Occupational Self-Efficacy	Pearson r
2a	Job Demands and Working Occupational Self-Efficacy	Pearson r
2b	Job Demands and Learning Occupational Self-Efficacy	Pearson r
3-5	Employment Intention, Job Demands, Learning Occupational Self-Efficacy, Working Occupational Self-Efficacy, Social Occupational Self-Efficacy, Personal Efficacy Beliefs, Self Perceived Stereotypes, Age, Education, Income	Multinomial Logistic Regression

APPENDIX I

PEARSON PRODUCT MOMENT CORRELATION TABLES FOR FULL AND SEPARATE DATA SETS

Correlations among the Predictor Model Variables for Complete Data Set

Variables	1	2	3	4	5	6	7	8
1. Self-Perceived Stereotypes	**.92**							
2. Job Demands	-.27*	**.83**						
3. Performance Self-Efficacy	-.57*	.32*	**.87**					
4. Learning Self-Efficacy	-.62*	.40*	.75*	**.74**				
5. Social Self-Efficacy	-.62*	.30*	.67*	.65*	**.88**			
6. Perceived Worker Stereotype	.49*	-.05	-.26*	-.29*	-.36*	**.96**		
7. Total Occupational Self-Efficacy	-.68*	.38*	.91*	.88*	.85*	-.33*	**.92**	
8. Personal Efficacy Beliefs	.51*	-.24*	-.53*	-.47*	-.41*	.27*	-.52*	**.88**

Coefficient alphas are shown in bold on the diagonal. *$p < .001$

Correlations among the Predictor Model Variables for Online Data Set

Variables	1	2	3	4	5	6	7	8
1. Self-Perceived Stereotypes	**.92**							
2. Job Demands	-.27*	**.86**						
3. Performance Self-Efficacy	-.57*	.28*	**.86**					
4. Learning Self-Efficacy	-.60*	.38*	.73*	**.81**				
5. Social Self-Efficacy	-.62*	.27*	.64*	.59*	**.88**			
6. Perceived Worker Stereotype	.46*	-.11	-.21*	-.21*	-.26*	**.97**		
7. Total Occupational Self-Efficacy	-.68*	.37*	.91*	.87*	.81*	-.23*	**.93**	
8. Personal Efficacy Beliefs	.52*	-.17*	-.59*	-.51*	-.43*	.29*	-.57*	**.81**

Coefficient alphas are shown in bold on the diagonal. *p < .001

Correlations among the Predictor Model Variables for Paper and Pencil Data Set

Variables	1	2	3	4	5	6	7	8
1. Self-Perceived Stereotypes	**.93**							
2. Job Demands	-.27*	**.77**						
3. Performance Self-Efficacy	-.56*	.32*	**.87**					
4. Learning Self-Efficacy	-.64*	.41*	.77*	**.67**				
5. Social Self-Efficacy	-.63*	.32*	.71*	.71*	**.89**			
6. Perceived Worker Stereotype	.54*	-.03	-.38*	-.42*	-.51*	**.95**		
7. Total Occupational Self-Efficacy	-.68*	.37*	.91*	.90*	.90*	-.48*	**.92**	
8. Personal Efficacy Beliefs	.52*	-.18*	-.45*	-.43*	-.40*	.33*	-.46*	**.89**

Coefficient alphas are shown in bold on the diagonal. *p < .001

APPENDIX J

MULTINOMIAL LOGISTIC REGRESSION RESULTS FOR DEMOGRAPHIC AND ATTITUDINAL VARIABLES

Multinomial Logistic Regression Results for Demographic Variables

Employment Intention	Predictor	B	Std. Error	Wald	Sig.	OR	95% CI Low	95% CI High
Retire vs. Bridge Employment	Intercept	-6.97	3.03	5.30	0.02	--	--	--
	HEALTH	0.38	0.26	2.19	0.14	1.46	0.88	2.41
	CHILDREN	-0.20	0.36	0.30	0.59	0.82	0.41	1.67
	EDUCATE	-0.40**	0.15	6.88	0.01	0.67	0.50	0.90
	AGE	0.10*	0.05	5.21	0.02	1.11	1.01	1.21
	INCOME	0.49**	0.18	7.09	0.01	1.63	1.14	2.34
	GENDER	-0.04	0.50	0.01	0.93	0.96	0.36	2.55
	SPOUSE F-TIME	-0.08	0.67	0.02	0.90	0.92	0.25	3.43
	SPOUSE P-TIME	0.09	0.78	0.01	0.91	1.10	0.24	5.05
	SPOUSE RETIRED	0.74	0.75	0.98	0.32	2.11	0.48	9.23
	ETHNICITY	0.30	0.58	0.27	0.60	1.36	0.43	4.25
Continue Work vs. Bridge Employment	Intercept	-0.38	2.58	0.02	0.88	--	--	--
	HEALTH	-0.09	0.21	0.17	0.68	0.92	0.61	1.38
	CHILDREN	-0.24	0.29	0.67	0.41	0.79	0.44	1.40
	EDUCATE	-0.25*	0.12	4.06	0.04	0.78	0.61	0.99
	AGE	0.03	0.04	0.40	0.53	1.03	0.95	1.11
	INCOME	0.53**	0.16	11.31	0.00	1.69	1.25	2.30
	GENDER	0.25	0.41	0.36	0.55	1.28	0.57	2.87
	SPOUSE F-TIME	-0.54	0.53	1.05	0.31	0.58	0.21	1.64
	SPOUSE P-TIME	0.03	0.61	0.00	0.96	1.03	0.31	3.44
	SPOUSE RETIRED	0.21	0.65	0.10	0.75	1.23	0.34	4.44
	ETHNICITY	0.05	0.48	0.01	0.92	1.05	0.41	2.67
Bridge Employment vs. Retire	Intercept	7.06	3.25	4.72	0.03	--	--	--
	HEALTH	-0.38	0.26	2.19	0.14	0.68	0.41	1.13
	CHILDREN	0.20	0.36	0.30	0.59	1.22	0.60	2.47
	EDUCATE	0.40**	0.15	6.88	0.01	1.49	1.11	2.00
	AGE	-0.10*	0.05	5.21	0.02	0.90	0.82	0.99
	INCOME	-0.49**	0.18	7.09	0.01	0.61	0.43	0.88
	GENDER	-0.04	0.50	0.01	0.93	0.96	0.39	2.79
	SPOUSE F-TIME	0.08	0.67	0.02	0.90	1.09	0.29	4.06
	SPOUSE P-TIME	-0.09	0.78	0.01	0.91	0.91	0.20	4.20
	SPOUSE RETIRED	-0.74	0.75	0.98	0.32	0.47	0.11	2.08
	ETHNICITY	-0.30	0.58	0.27	0.60	0.74	0.24	2.31

Note: * significant at the .05 level, ** significant at the .01 level. df = 20. N=264.
-2 Log Likelihood = 411.96. Chi-square = 40.54, p< .01. Nagelkerke Pseudo R-Square = .173. OR = odds ratio.

Multinomial Logistic Regression Results for Attitudinal Variables in Addition to Significant Demographic Variables

Employment Intention	Predictor	B	Std. Error	Wald	Sig.	OR	95% CI Low	95% CI High
Retire vs. Bridge Employment	Intercept	-1.39	3.79	0.14	0.71	--	--	--
	AGE	0.14**	0.04	11.12	0.00	1.15	1.06	1.26
	INCOME	0.47**	0.15	9.40	0.00	1.60	1.18	2.16
	EDUCATE	-0.23	0.15	2.31	0.13	0.80	0.60	1.07
	STYP_AVG	-0.02	0.32	0.00	0.95	0.98	0.52	1.85
	JOB_AVG	-0.21	0.23	0.82	0.37	0.81	0.51	1.28
	LRN_OSE	-0.56	0.57	0.97	0.32	0.57	0.19	1.74
	PEBS_AVG	-0.03	0.36	0.01	0.93	0.97	0.47	1.98
	SOC_OSE	0.73	0.49	2.22	0.14	2.08	0.79	5.46
	PERF_OSE	-1.76**	0.72	6.01	0.01	0.17	0.04	0.70
Continue Work vs. Bridge Employment	Intercept	1.13	3.17	0.13	0.72	--	--	--
	AGE	0.06	0.04	2.25	0.13	1.06	0.98	1.14
	INCOME	0.40**	0.13	9.51	0.00	1.49	1.16	1.91
	EDUCATE	-0.12	0.12	1.05	0.31	0.89	0.71	1.12
	STYP_AVG	-0.42	0.26	2.69	0.10	0.65	0.39	1.09
	JOB_AVG	0.05	0.19	0.07	0.80	1.05	0.73	1.51
	LRN_OSE	-0.13	0.45	0.09	0.77	0.88	0.36	2.12
	PEBS_AVG	0.24	0.31	0.62	0.43	1.27	0.70	2.33
	SOC_OSE	0.18	0.39	0.21	0.64	1.20	0.56	2.57
	PERF_OSE	-0.76	0.58	1.76	0.18	0.47	0.15	1.44
Bridge Employment vs. Retire	Intercept	1.04	3.66	0.08	0.78	--	--	--
	AGE	-0.14**	0.04	10.76	0.00	0.87	0.80	0.95
	INCOME	-0.46**	0.15	9.29	0.00	0.63	0.47	0.85
	EDUCATE	0.24	0.15	2.54	0.11	1.27	0.95	1.69
	STYP_AVG	0.07	0.31	0.06	0.81	1.08	0.59	1.96
	JOB_AVG	0.18	0.23	0.58	0.45	1.19	0.76	1.88
	LRN_OSE	0.64	0.56	1.31	0.25	1.90	0.63	5.68
	SOC_OSE	-0.68	0.49	1.96	0.16	0.51	0.19	1.31
	PERF_OSE	1.65*	0.69	5.75	0.02	5.21	1.35	20.11

Note: * significant at the .05 level, ** significant at the .01 level. df = 16. N=290. -2 Log Likelihood = 450.88. Chi-square = 51.98, p< .01. Nagelkerke Pseudo R-Square = .199. OR = odds ratio.

Multinomial Logistic Regression Classification Results for Demographic Variables

	Predicted			
Observed	stop work	Continue work	switch jobs/industries	Percent Correct
stop work	4.00	44.00	1.00	8.16
continue work	5.00	172.00	0.00	97.18
switch jobs/industries	0.00	38.00	0.00	0.00
Overall Percentage	3.41	96.21	0.38	66.67

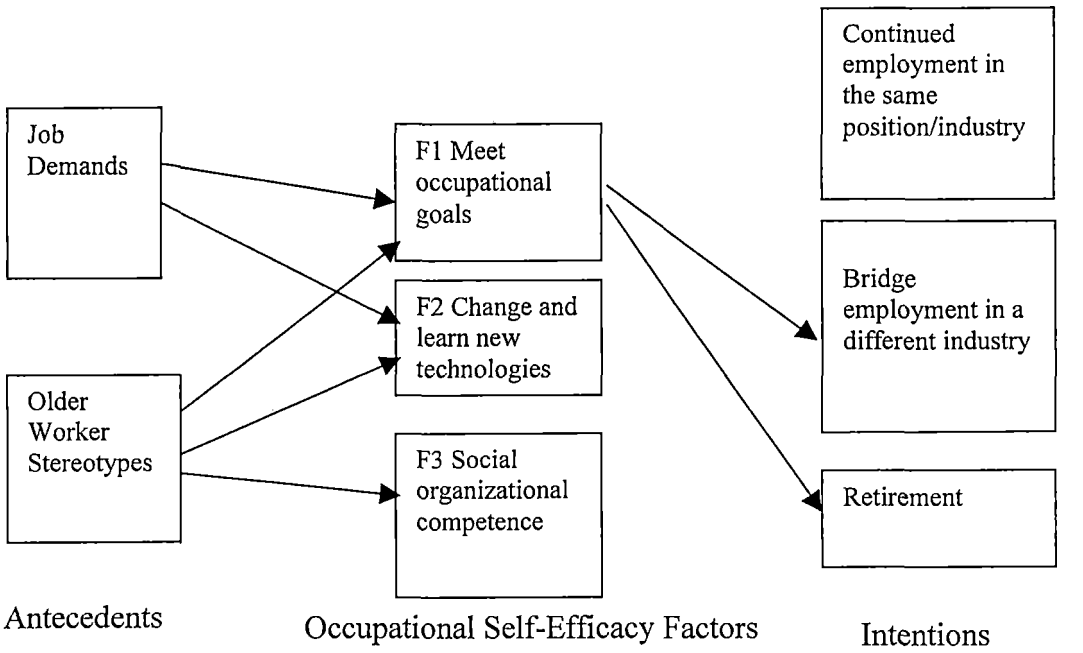
Multinomial Logistic Regression Classification Results for Attitudinal Variables in Addition to Significant Demographic Variables

	Predicted			
Observed	stop work	Continue work	switch jobs/industries	Percent Correct
stop work	10.00	42.00	0.00	19.23
continue work	5.00	185.00	1.00	96.86
switch jobs/industries	1.00	40.00	2.00	4.65
Overall Percentage	5.59	93.36	1.05	68.88

APPENDIX K

CONCEPTUAL MODEL OF OCCUPATIONAL SELF-EFFICACY'S INFLUENCE ON BRIDGE EMPLOYMENT, CONTINUED EMPLOYMENT, AND RETIREMENT INTENTIONS WITH SIGNIFICANT RELATIONSHIPS FLAGGED

Conceptual Model of Occupational Self-Efficacy's Influence on Bridge Employment, Continued Employment, and Retirement Intentions with Significant Relationships Flagged by Arrows



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