RESILIENCE OF MATURE JOB SEEKERS:
A FOUR-WAVE LONGITUDINAL INVESTIGATION

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Yoshie Nakai
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RESILIENCE OF MATURE JOB SEEKERS:
A FOUR-WAVE LONGITUDINAL INVESTIGATION

Yoshie Nakai
Dissertation

Approved:

Advisor
Dr. Andrea F. Snell

Committee Member
Dr. Dennis Doverspike

Committee Member
Dr. Cheryl Elman

Committee Member
Dr. Harvey L. Sterns

Committee Member
Dr. Linda M. Subich

Accepted:

Department Chair
Dr. Paul E. Levy

Dean of the College
Dr. Chand Midha

Dean of the Graduate School
Dr. George R. Newkome

Date
ABSTRACT

The current study investigated resilience among older job seekers in a longitudinal design. Based on resilience literature and Social Cognitive theory, effects of job search self-efficacy, expectation, and social support were examined for four different job search behaviors: contacting friends and family, contacting potential employers, using traditional methods, and using internet. In this study, a total of 376 adults above age 40 were recruited from a local job fair. Participants completed a survey at the job fair and were followed up by three phone surveys over a 3-month period. The data were analyzed using growth curve modeling. It was found that there was between-person variability in job search at initial point. As time went on job seekers were less likely to contact potential employers. There was significant variability in growth patterns for search by traditional methods such as looking in newspapers and preparing resumes. In examining the proposed resilience mechanism, the current result highlighted the criticality of job search self-efficacy over time. Those who were confident in carrying out search behavior showed more resilience to keep searching for a job. The results from the current study and implications of the findings are discussed in detail.
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CHAPTER I
INTRODUCTION

Employment patterns among today’s older adults widely vary. Each older adult may have different needs and desires and envision their employment and retirement differently. Although clear transition from employment to retirement is still prevalent, increasing portion of older population in U.S. are staying in the labor force past the traditional retirement age (Brown, 2003). For some individuals, this is an opportunity to take gradual transition from full-time employment to complete retirement (Feldman, 1994) while some individuals were forced to work longer with their financial need (Heidkamp, Corre, & Van Horn, 2010). In addition, unemployment became more prevalent among older population. Approximately 1.9 million people above age 65 were unemployed in U.S. (BLS, 2009). Although the previous job search literature focused on younger population such as those who are newly entering the workforce, switching a job, and looking for reemployment after job loss, job search became also relevant for people in the later career.

Nature of job search process may be different for this emerging subgroup of job seekers. Compared to younger population, older job seekers may have unique needs considering their varying work experience, context for searching, and external demand such as family responsibility. In spite of its rising number, understanding of job search
process among older job seekers is limited. The more knowledge about the older job seekers and their job search experience can prevent a misunderstanding of these individuals and create an alignment between support options and their needs. The current study aimed to understand job search process among older job seekers by exploring their job search behavior over time and personal and social factors that encourage perseverance in searching.

One of the reasons why job search process for older adults may be distinct from younger counterparts is their unique obstacles in the search process. There is a potential gap between skills and job experiences of older job seekers and current job opportunities. The nature of many jobs has changed dramatically. Technology has a potential to enhance people’s ability to work, but simultaneously has introduced a threat for some people. Charness, Czaja, and Sharit (2007) put it well: “A fast-writing clerk with a quill, inkwell, and paper files cannot compete even with a slow-typing clerk who is trained and equipped with a database, email, word processor, and printer” (p. 226). Older adults tend to have a “firm specific human capital” that is a set of skills specific to a job for their employers and less likely to transfer across companies (Lahey, 2008). With the changing nature of jobs, continuous learning is a must to maintain a viable skill set in today’s job market. Although statements such as ‘older adults do not learn’ are far from accurate, age has been linked to personal and situational variables that influence participation in training and developmental activities (Maurer, Weiss, & Barbeite, 2003).

Age discrimination also deters older job seekers’ search process. Employers may not recognize the skills and abilities of a job seeker because of his/her chronological age.
Assumptions of high health insurance cost, skill obsolescence and shorter career potential of older workers relative to younger workers may lead employers to believe that hiring older workers is not a worthy investment. In a simulated study, employment decisions for older workers were generally negative when raters were younger and job relevant information about an applicant was available (Finkelstein, Burke, & Raju, 1995). Another research finding suggested that older job seekers were less likely to be called for an interview after sending a resume that was identical to that of a younger job seeker (Lahey, 2008). With continuous rejection from employers, job seekers may attribute the failure internally and gradually lose confidence in searching a job.

Social influences can also push older workers out of the job market. Age norms subscribe certain behaviors for people in specific age groups (Neugarten, Moore, & Lowe, 1965). Older adults are expected to retire and they may think they should retire. Although mandatory retirement has been abolished in most jobs, roughly a quarter of older adults plan to completely retire at age 65 (Brown, 2003). This societal expectation for older adults to retire may discourage older job seekers from continuing to search for a job and limit the job search resources and employment opportunities available for them.

These factors, such as a mismatch with the current job opportunities, age discrimination and unsupportive social norms together, can make older adults’ job searching more difficult. The average period of job search tends to be longer for older job seekers. In 2008, the average duration of unemployment was 21.3 weeks for people above age 65 compared to 17.9 weeks for all unemployed people above age 16 (BLS,
About one-third of those above 55 years old reported unemployment of 27 weeks (Rix, 2009). Not all the unemployed individuals will keep searching for a job. Population of “marginally attached to the labor force” (2009) includes individuals who wanted employment and searched for a job in the past year, but they are not currently engaged in a job search (BLS, 2009). Among 2.1 million people who were marginally attached to a job, 717,000 people were considered as discouraged workers. These individuals believed that no jobs were available for them due to their lack of qualifications, employer discrimination and prolonged job search experience (BLS, 2009). The increase of discouraged workers is especially pronounced for the older population. The number of older adults who are classified as discouraged tripled between 2007 and 2008 (Rix, 2009).

The consequences of becoming discouraged during the job search are not limited to the inability to find employment. Rife and colleagues (Rife & First, 1989; Rife & Kilty, 1989) specifically studied older job seekers above age 50. It was found that compared to active job seekers, discouraged older job seekers showed higher levels of psychological discouragement, depression, social isolation, and lower self-efficacy and life satisfaction. Furthermore, discouraged older workers reported financial difficulties. They were also likely to attribute their age to the prolonged unemployment and reported less usage of social and employment services. In addition to increasing number of older adults in a job market, their unique challenges in search process, potentially prolonged search period, prevalence of discouragement and negative economic and psychological
consequences call for a better understanding of this population and effective intervention strategies.

Dynamic Process of Job Search

Job search is best viewed as a process, not a single-time event. Accumulating research studies suggest varying experiences among job seekers (i.e., Borgen & Amundson 1987) and within-person experience over time (i.e., Wanberg, Glomb, Song, & Sorenson, 2005). Purpose of the current study is to explore this dynamic process through search behavior and its predictors that encourage search behaviors among older adults.

In a meta-analytic review of job search behaviors and their antecedents, Kanfer, Wanberg, and Kantrowitz (2001) defined job search behaviors as “a purposive, volitional, self-managed, and dynamic pattern of activity directed toward the goal of gaining employment” (p. 411, Wanberg et al., 2005) and linked to search outcomes such as receiving job offer and later employment status. The previous job search literature has supported that more search behaviors increase the likelihood of later job attainment. Thus, persistence in search behaviors in spite of prolonged search period and obstacles is critical in finding a job. This persistence in job search can be linked to the concept of “resilience” that is a phenomenon of a person striving through and bouncing back from hard (Luthar, Cicchetti, & Becker, 2000; Masten, Best, & Garmezy, 1990; Rutter, 1990). According to Rutter (1990, 1993), resilience can be conceptualized as a complex process involving multiple factors. In this view, resilience may not be captured as a cross-sectional picture, and identification of these factors that create resilience in targeted
context is critical. That is, there may be unique set of “resilience factors” in job search context that contribute to perseverance of job search behaviors.

The resilient factors for job seekers can be both personal and contextual. Previous studies have identified various antecedents of job search behaviors and provided a complex picture of interactions among job search behaviors, job seeker’s personal characteristics and contextual factors (i.e., Wanberg, Watt, & Rumsey, 1996). This is consistent with social cognitive view of human behavior. According to the social cognitive theory (Bandura, 1986), there are complex and dynamic interactions among behaviors, cognitive and personal factors, and environmental factors. According to this theory, human behavior cannot be explained only by individual differences or by social and other situational factors. These internal and external factors interact with each other to affect behavior. On the other hand, behavior also influences these factors. This dynamic view of human behavior, termed triadic reciprocity (Bandura, 1977, 1978), provides a valuable framework in understanding job search process.

Job search usually does not occur as a single occurrence of action. Job seeking may involve a variety of behaviors such as learning how to search, cultivating opportunities, and actually applying and going through the application process until a satisfactory job is obtained. The triadic reciprocity suggests that these behaviors are influenced by both personal and environmental factors, and the behaviors, in turn, can affect these factors.

Frameworks from the resilience literature and social cognitive theory supported a dynamic conceptualization of job search perseverance and contributing factors. Using a
longitudinal design, the current study aimed to capture a dynamic job search process among older job seekers including their job search behaviors, personal and contextual variables.

**Perseverance Among Mature Job Seekers**

*Proposed Model*

The current study focused on job search behavior among older job seekers over time as target outcome. Job seeking behaviors act as primary vehicle to the desirable job search outcomes such as number of job offers and employment status (Kanfer et al., 2001). Two personal characteristics and one social factor were identified as “resilience factors” for perseverance of search behaviors among older job seekers. Two personal factors were suggested by the social cognitive theory. Among the personal factors forming the triadic reciprocality, Bandura emphasized self-efficacy and outcome expectations (1977, 1986). If a person believes in his/her ability to execute a certain behavior and evaluates that the behavior would lead to favorable consequences, he/she is more likely to initiate the behavior and persistently expend effort toward the behavior. In the job search context, how confident job seekers are in conducting job search and their expectation that they will find a job as a result would be closely related to their initiation and persistence of job seeking behaviors. The third factor is social support. In the face of adversity, resources provided by others can reduce and buffer the negative effects (Cohen & Syme, 1985). Other people may provide information about job leads and how-to search for a job as well as offer emotional support throughout the process. Thus, the current
study proposed three resilient factors, job search self-efficacy, outcome expectation and social support, in encouraging job search perseverance.

Benefit of Longitudinal Study in Job Search Context

Another hallmark of the current study is its longitudinal design. Job search behavior and two of the resilience factors, job search self-efficacy and outcome expectation, were measured over time. Understanding patterns of job search behaviors over time is critical for effective interventions and has strong implications for policy makers. If the course of development varies among job seekers, different types of interventions may be more appropriate at different points in time and for different kinds of job seekers.

A longitudinal design provides different types of information regarding the job search process. First, it provides information about within-person variability in the outcome variable. It refers to how much a job seeker changes in an outcome variable across time. For instance, in Figure 1-1, Person A changes in the outcome variable across time whereas Person B’s outcome variable remains constant. A second piece of information from the longitudinal investigation tells us the between-person variability in the outcome variable. That is, whether the patterns on the outcome variable differ from one person to the other. Each pattern can be understood with two parts: initial starting point and the trajectory of change. As illustrated in Figure 1-2, Persons A and B have the same level of the outcome variable at the start. However, their trajectories over time are very different. Person A’s outcome variable increases and Person B’s decreases over time. When compared to Person C, the initial status of Person A is higher. However, their
slopes are the same. Thus, the use of a longitudinal design in this study provides a dynamic representation of older adults’ job seeking behaviors.

**Potential Contributions of the Current Study**

The current study investigates resilience among older job seekers. Self-efficacy, outcome expectation, and social support would encourage job seeking behaviors among older adults over time. There are three main ways that this study contributes to the research and practice. First, this study targets an understudied population. In spite of the increasing number of older adults in the job market, the empirical knowledge of this population is scarce. By targeting the job seeking behaviors and relevant personal and social factors, this study extends a few empirical studies of older job seekers conducted previously (i.e., Adams & Rau, 2004; Rife & Kilty, 1989).

Second, inclusion of malleable factors such as self-efficacy and expectation in studying job seeking behaviors has direct implications for intervention. As evidenced in the previous studies (Rife & Kilty, 1989), older job seekers may be especially prone to negative economic and psychological consequences of prolonged search. Variables that protect job seekers from negative effects should be incorporated into the services and resources toward this particular population of job seekers.

Finally, the current study extends the previous literature on job seeking and unemployment in cross-sectional studies by utilizing a longitudinal design. This design facilitates an understanding of the relationships between protective factors and job search behavior across time. This is a step toward disentangling complex interactions among these personal, social and behavioral variables in a job search context.
Figure 1-1.

Within-person variability in outcome over time.
Figure 1-2.

Between-person variability in initial point and slope.
CHAPTER II

REVIEW OF LITERATURE

This study is a first step toward understanding older adults’ job searching process with a longitudinal perspective. The purpose of this study was to capture dynamic nature of job search behavior over time and to identify the “resilience factors”, which encourage persistence in job search among older job seekers. The review of this literature summarizes the issues surrounding the job search process for older adults. First, the review focuses on identifying these older adults in the current job market. Second, the impact of unemployment and job search at the individual, family and societal level will be discussed. The third section reviews literature on resilience linking to the job search context. Finally, a dynamic job search process is conceptualized for older job seekers. This process includes job seeking behaviors as a target outcome and three resilience factors specific to the current context: job search self-efficacy, outcome expectation and social support. Each resilience factors will be discussed in detail.

*Older Adults in the Job Market*

More older adults are remaining in the workforce. Among currently employed adults between age 50 and 70, 68 percent answered that they plan to be an active participant in the workforce even after they have passed the traditional retirement age (Brown, 2003). Labor force participation of people above age 65 has been increasing in
the U.S. since the 1990s (BLS, 2008). Currently about 1 in 16 adults above 65 is either employed or looking for a job. People above age 55 occupied 19 percent of the total U.S. labor force in 2009 (Johnson & Kaminski, 2010). This is a dramatic increase from the 12 percent share of the total labor force in 1993.

The reasons for working and the forms of employment may widely vary by individuals. Financial security is a critical determinant of working longer. Pre-retirees who are planning to work into retirement raised monetary need as a primary reason for working into retirement (Brown, 2003). Some are the primary earner of their family. In addition to rising living costs, loans and mortgages, as well as having childcare and eldercare responsibilities have all contributed to an increased need for additional income. Some retirees work to supplement social security and other retirement income. Social Security is a primary retirement income for people above age 65. However, it may not be a secure source of financial stability for retirees (Munnell, 2007). In addition, health insurance expense is a concern for many older adults. Health benefit needs was the second major factor for working following financial needs in the aforementioned Brown (2003) survey.

Non-instrumental reasons are also an important contributing factor for why individuals want to continue to work. People often identify themselves with work and regard work as part of their life (Noonan, 2005). In addition to financial reasons, Mor-Barak (1995) suggested social (meeting and interacting with other people), personal (being satisfied with life and sustaining self-esteem), and generative (passing knowledge and skills to next generations) factors contribute to a meaning of work among older
workers. Poor health, on the other hand, can push older workers to retirement (Shultz, Morton, & Weckerle, 1998). Family context also impacts an older adults’ employment decisions (Smyer & Pit-Catsouphes, 2007). Some people decide to retire to spend more time with family while others continue working to fulfill responsibilities for their dependents.

Forms of work among older adults vary widely. The preferred “retirement job” may vary in schedule (i.e., part-time vs. full-time) as well as industry (same vs. different from previous jobs) (Brown, 2003). This introduces the idea of phased retirement, partial retirement (Gustman & Steinmeier, 1984) or bridge employment (Feldman, 1994) which is a gradual transition from a full-time career to complete retirement by taking a job with flexibility and less demand (i.e., part-time job). Research by Chen and Scott (2006) suggest that those who took phased retirement are more likely to be educated, financially secure and have a positive view of work. In addition, people who pursued bridge employment are healthier and younger, had working spouse and dependent children (Kim & Feldman, 2000), and perceived uncertainty around their retirement plans (Davis, 2003). Johnson and Kawachi (2007) suggested that many older adults are working longer and this is consistent with the “phased retirement” idea. These people are most likely recipients of pension or Social Security benefits who can afford a reduced income from their job. In exchange for reduced income, they may be working for a job that leaves room to enjoy other activities. Although part-time employment has been more common among people above age 65, more people in this age segment are taking full-time jobs. In
2007, the majority of older workers are working full-time (56%) compared to part-time (44%, BLS, 2008). Some of those working part-time are in need of full-time job.

Older job seekers’ needs and priorities may be linked to their preferred work. Nakai, Chang, Snell, and Fluckinger (2011) suggested that the job market may contain older job seekers who are satisficers, free agents, and maximizers. Satisficers work to earn money and take care of family and are willing to change jobs and industry. Free agents have less financial and family responsibilities and are looking for a mostly part-time job to fulfill their intrinsic needs such as life satisfaction and learning. Maximizers are seeking a job to satisfy a wide range of needs for family, generativity, their own career development and physical and psychological well-being.

The above review suggests that the current job market contains a rising number of older adults with varying background and employment needs. While many older adults work for financial reasons, non-instrumental reasons such as family, social relationships, generativity are also important for this population.

*Unemployment among Older Adults*

In 2009, 1.9 million adults above age 65 were unemployed in the U.S. (BLS, 2009). This number represents those who are actively searching for a job. Additionally, 151,000 adults dropped out of the job market due to their discouragement over job prospects. Job market can be especially rough for older job seekers. It takes about seven and half months for older adults above age 55 to get reemployed (BLS, 2009). Although the average unemployment period is longer for older adults, the reasons are not clear. The
prolonged and exhausting job search period can wear out the older job seekers and make it difficult for them to keep a positive attitude during the job search.

Unemployment generally has a negative influence on people’s life. As unemployment is considered as one of the stressful life experiences, many researchers have investigated its effect on a wide range of outcomes such as individual’s physical and psychological well-being (i.e., McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Paul & Moser, 2009) and family dynamics (i.e., Broman, Hamilton, & Hoffman, 2001). Although some embrace the unemployment period as a freedom and time to re-evaluate their life (i.e., Borgen & Amundson, 1987), mounting evidences suggest that unemployment has an unfavorable effect on individuals, their family as well as their community and society. This is especially concerning for older population with potentially prolonged search period and high prevalence of discouragement.

**Impact on Job Seekers**

Unemployment typically pushes individuals into a position of financial insecurity and strain. An increasing number of older adults in the U.S. are claiming Social Security (Johnson & Mommaerts, 2010). This is not only because more people are turning 62, but also can be contributed to higher unemployment rate among the older population. Johnson and Mommaerts (2010) warned that claiming Social Security benefits earlier permanently reduces monthly payments and puts their future financial security at risk. When older displaced workers find a new job, it does not pay as well as the previous one (Johnson & Kawachi, 2007). In spite of their financial need, salary of their new job is about the half of their previous job. Unless these individuals have other sources of
income (i.e., spouse, Social Security, Pension), it deteriorates not only their current financial state but also affects their retirement savings and future financial security. Financial strain may create further problems on mental health and family dynamics. For instance, Krause (1987) found that older adults with chronic financial strain are more depressed. Specifically, these older adults reported more negative emotions, exhibited more physical indicators of depression and displayed less positive affect.

For many job seekers who lost their previous jobs, they have the double bind of both searching for a new job while grieving the loss of their former. Work provides important elements in many people’s lives. Warr (1987) discussed nine features of work that impact one’s mental health: opportunity for control, opportunity to use skills, externally generated goals, variety in environment that requires different actions, environmental clarity, money, physical security, opportunity for interpersonal contact, and valued social position. Warr argued that relationships between these environmental elements and mental health are analogous to a relationship between vitamins and physical health. Vitamins are required and have positive effect on health to a certain level, but additional intake does not matter after reaching “plateau.” A jobless environment, however, lacks in these features and may have harmful consequences for the mental health of unemployed.

The review by Warr (1987) documented a generally negative impact of unemployment on mental health, physical health and family processes. Meta-analytic evidence among cross-sectional examinations of employed and unemployed individuals showed that unemployed people have poorer mental health, lower perceived physical
health, lower life and family satisfaction as well as lower self-esteem than employed counterparts (McKee-Ryan et al., 2005; Paul & Moser, 2009). In longitudinal investigations, people who became unemployed experienced a significant decline in mental health (McKee-Ryan et al., 2005). Moreover, Paul and Moser (2009) suggested that unemployment causes a worsening of mental health based on a meta-analysis of 85 longitudinal studies. Those who become unemployed showed decline in mental health and those who become reemployed improved in their mental health condition.

When considering the effect of unemployment across time, prolonged unemployment is especially harmful. Length of unemployment period is related to the lower physical and psychological well-being (McKee-Ryan et al., 2005; Paul & Moser, 2009). Baum, Fleming and Reddy (1986) reported that those who are unemployed for three to five months showed elevation of epinephrine and norepinephrine that are biomedical indicators of stress. These long-unemployed individuals were less persistent on complex tasks compared to employed and shorter-unemployed individuals. Warr and Jackson (1985) found that those who were continuously unemployed for nine months reported poorer psychological health, less commitment to work and job search activities. Older job seekers, whose search length is longer on average, may be especially prone to these issues.

The effect of unemployment widely varies by individuals (Warr, 1987). For instance, among unemployed, those who are more committed to work, experienced more a financial strain, perceived the situation as more stressful, put more effort into the job search and reported poorer mental health. On the other hand, those who have positive
view of self, financial resources, and social support and use effective coping strategies are less likely to experience decline in well-being in spite of their unemployment situation (McKee-Ryan et al., 2005).

Jackson and Warr (1984) discussed that the relationship between age and well-being during unemployment is curvilinear. People in their 30s may have more dependents and those in their 40s reported greatest financial stress and psychological deterioration. Currently, 25 years after the Jackson and Warr investigation, many people’s work life has been extended. More people work into retirement and many of them are concerned about their financial security. Thus, it is probable that people in their 50s, 60s and above are also under financial stress and prone to experience physical and psychological decline, just like people in their 30s and 40s in Warr and Jackson (1984).

Impact on Family Members

Unemployment creates strain for family life. Based on cross-sectional evidences, unemployed husbands and their spouses reported poorer marital adjustment and communication compared to employed couples (Larson, 1984). Workers at a plant, which was closing, experienced more family conflicts compared to workers at a nonclosing plant (Broman et al., 2001). Longitudinal data also suggests that unemployment also increases the risk of divorce (Lampard, 1994). Although it is not conclusive, unemployment impacts spouse’s and children’s well-being (Ström, 2003). Spouses of unemployed individuals reported elevated level of psychological distress (Rook, Dooley, & Catalano, 1991), depression and anxiety (Cochrane & Stopes-Roe, 1981). Based on a Danish sample, more children of unemployed parents reported witnessing parents’
violence, addiction, or experienced separation from one of the parents in their early age (Christoffersen, 1994).

Although family can provide critical resources (i.e., social support) during unemployment, unemployment may increase family strain and conflicts. In fact, Vinokur and van Ryn (1993) found that social support and social undermining (i.e., negative social support, interpersonal conflicts) from significant others have independent effects on unemployed individuals’ mental health. Social support may buffer the harmful effect of unemployment whereas social undermining can have adverse effect on the unemployed.

*Impact on Community and Society*

Unemployment has social implications (Heidkamp & Van Horn, 2008). Unemployment in a region may propel people to move out of the community to seek affordable living or better job prospects. It decreases an opportunity for community engagement and may harm local businesses. For government, unemployment decreases tax revenues and increases social costs to create services for unemployed and their families. As unemployment spreads among older adults, societal and community-level support system for this population is urgently needed.

In sum, unemployment has been studied as an individual’s experience, a family pressure, a community handicap and a societal issue. Although financial implications are is critical, unemployment is not simply loss of income. As Warr (1987) has suggested, work can provide more than income to our life. Job loss can be devastating, and job search can be discouraging. Social and psychological perspectives on unemployment and
the job search issues shed some light on individual’s experience through understanding their thinking process, behaviors and well-being. The accumulating knowledge of these issues may lead us to creative solutions to overcome the challenges.

One Picture Does Not Fit All.

When focusing on an individual’s experience in the job search process, it is important to recognize variation in experiences among job seekers as well as within a job seeker over time. The job market may contain individuals with different levels of financial needs, employment commitment, confidence in searching for a job, and well-being (Wanberg & Marchese, 1994). In spite of an increasing share of older job seekers in the job market, we do not know much about this emerging population. “Older job seekers” may vary in work experiences, circumstances for job search, and family and social situations (i.e., Mor-Barak, 1995; Nakai et al., 2011). Some are searching for a part-time job for a generative purpose while others are in need for a full-time job to fulfill their family and financial obligations. Unemployed individuals also vary in their course of experiences (Borgen & Amundson, 1987; McKee-Ryan et al., 2005; Wanberg et al., 2005). Some become discouraged and stop searching for a job while others keep searching. In order to understand older job seekers, it is vital to appreciate the heterogeneous and dynamic nature of this population and their experiences.

Resilience

In facing unique challenges and negative consequences of prolonged search, perseverance in searching is critical. Resilience literature has studied personal quality and/or phenomenon, in which a person “bounces back” from hard times in various
contexts. In job search context, resilience may be conceptualized as persistently searching for a job in spite of negative experiences or unsuccessful search outcomes. Considering the prevalence of discouragement especially among older job seekers, identifying variables that create resilience for this population is critical. The following section includes the literature review on phenomenon of resilience and resilient people and a discussion of its applicability to the job search context.

Resilience has been defined in various ways: “(T)he positive pole of the ubiquitous phenomenon of individual difference in people’s responses to stress and adversity” (p.181, Rutter, 1990), “a dynamic process encompassing positive adaptation within the context of significant adversity” (p. 543, Luthar, Cicchetti, & Becker, 2000), and “the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (p. 426, Masten, Best, & Garmezy, 1990).

Earlier resilience literature was in the child development field and researchers examined personal, familial, and social “protective factors” that enable resilience to occur for children and adolescents at risk (Luthar, Cicchetti, & Becker, 2000). Application of resilience literature was not limited to child development but also to students delivering a speech (Tugade & Fredrickson, 2004), women who experienced an abortion (Major, Richards, Cooper, Cozzarelli, & Zubek, 1998), refugees in Kosovo (Riolli, Saicki, & Cepani, 2002), employees going through major organizational change (Wanberg & Banas, 2000), and job seekers (Moorhouse & Caltabiano, 2007).

Conceptualization of resilience varied by researchers. Some treated resilience as a stable quality of a person (i.e., Major et al., 1998; Wanberg & Banas, 2000) while others
conceptualized resilience as a dynamic process involving multiple factors (Rutter, 1990). Major and colleagues (1998) identified self-esteem, optimism and perceived control together would characterize a resilient personality in a study involving women who experienced an abortion. Women with such qualities viewed the abortion as less stressful and coped effectively in post-abortion period. Similar operationalization of resilience has been adopted in Wanberg and Banas (2000). Employees with high a resilience quality were more likely to accept the changes occurring in their organization. Tugade and Fredrickson (2004) argued that people with a resilient quality use positive emotions to negate the effect of stressful events. In the job search, Moorhouse and Caltabiano (2007) found that resilient job seekers were more likely to engage in job seeking behaviors compared to low resilient individuals. Moreover, job seekers with higher resilient qualities were less likely to become depressed in spite of prolonged job search period.

Rutter (1990) called for a “shift from protective variables to identifying the processes by which protection occurs”. The effect of single risk factor is hard to isolate since multiple risk factors interact to create a complex picture (Rutter, 1990). In the job search context, factors such as age discrimination, mismatch between existing and demanded skills, lack of knowledge on how to search for a job, and a prolonged search period may contribute to a risk mechanism of discouragement. However, not every job seeker becomes discouraged. Some job seekers, in spite of challenges, continue searching. Various individual and situational factors may contribute to how job seekers navigate their search process and shape different patterns psychological and behavioral outcomes over time.
The current study conceptualized resilience as a dynamic process/phenomenon instead of personal quality. Based on the literature review, three variables were included in the current study as “resilience factors” that contribute to resilience among older job seekers. The hypothesized job search process for older job seekers is summarized in Figure 2-1. Job search self-efficacy, outcome expectation and social support create a “shield” for older job seekers. Job seekers with certainty in their job search ability, firm linkage between the job search behavior and favorable outcomes, and support from other people are more likely to bounce back from adversity and keep searching until they find a job. Consistent with the process view of resilience, job search behaviors, two of the resilience factors (job search self-efficacy, outcome expectation), and some covariates (subjective well-being, perceived stress) were conceptualized as dynamic variables and measured in multiple time points.

Job Seeking Behaviors

Why is Job Seeking Behavior Important?

Job seeking behavior is a vehicle to acquire a job. Effective job search behaviors should lead to employment outcome. Job seeking behaviors aim to collect information about job opportunities and to prepare and submit job application materials. There are a variety of ways to achieve these goals. For instance, a job seeker may find job leads in newspaper ads, by word-of-mouth, or posted on an internet job board. Although quality, intensity and effort might vary by individuals, it is reasonable to argue that job seeking behavior is a prerequisite for a new job. Meta-analytical evidence supports that job search
behaviors, measured in intensity and effort, are related to employment outcomes (Kanfer et al., 2001).

In a context of unemployment, engaging in job seeking behaviors is also regarded as a type of coping. Coping is “the cognitive and behavioral efforts used to contend with events appraised as stressful” (Lazarus & Folkman, 1984; Wanberg, 1997). A type of coping behavior, which includes defining target issues and developing alternative solutions is called problem-focused coping (Wanberg, 1997). For unemployed individuals, focusing their attention and effort on job seeking behaviors helps not only increase a chance of employment but also disengages them from irrelevant thoughts and encourages them to use time in a more productive way. Others point out that a decline in job search behaviors is also an indication of emotional coping. Job seekers start to make fewer job applications to avoid potential rejection (McFadyen & Thomas, 1997).

Decline in job seeking behavior is also an observable indicator of psychological discouragement. By definition, “marginally attached to workforce” refers to those who are not actively engaging in job search behaviors for certain reasons in spite of their need or desire for a job. Some people cannot perform job search due to health issues and other commitments. Some become psychologically discouraged. That is, they withdraw from job search behaviors because they are exhausted and no longer believe that job search actually leads to a job. Job seeking behavior is an important stepping stone for finding a new job. It is also a form of coping for the unemployed and an indicator of discouragement. The following section reviews previous empirical and conceptual explorations of job seeking behaviors.
What is Job Seeking Behavior?

Job search behaviors in the research studies have been conceptualized and operationalized in various ways such as number of applications sent (Ellis & Taylor, 1983) and number of employers contacted (Dyer, 1973). These measures, however, may only capture a limited scope of job search behavior. According to the Current Population Survey (CPS), 55 percent of unemployed adults in the U.S. have contacted employers directly and 54 percent sent resumes or completed job applications (BLS, 2009). Job seekers also contact friends and relatives for job leads (29%), post or respond to job ads (18%), and use public and private employment services (23%, 9%, respectively).

A more global scope of job search behavior may be captured by job search intensity and effort measures. These measures were frequently used in the previous research studies. Intensity is often operationalized as an aggregate of how frequently one performed various job search behaviors (i.e., Blau, 1994). Effort, on the other hand, is job seeker’s perceived effort exerted in the job search. A meta-analysis by Kanfer and colleagues (2001) reported that job search intensity and effort are related to increased likelihood of later employment (rc_intensity = .18 and rc_effort = .30), an increased number of job offers (rc_intensity = .32 and rc_effort = .08), and shorter job search duration (rc_intensity = -.11 and rc_effort = -.40).

According to Schwab, Rynes and Aldag (1987), generating job alternatives is a function of job sources and search intensity. Thus, when job search behavior is measured in intensity, it is important to sample appropriate behaviors and sources. Job information may come from formal or informal sources (Barber, Daly, Giannantonio, & Phillips,
Formal sources are created primarily to assist job seekers and examples include a university placement center and an employment agency. Informal sources, on the other hand, include friends, family and co-workers. Unsuccessful job seekers were more dependent on formal sources compared to those who found a job.

Networking is the process of utilizing interpersonal resources to collect job information. Wanberg, Kanfer and Banas (2000) examined networking separately from general job search behaviors. Networking is effort and behaviors directed toward contacting friends, family, and others for job leads and search advice. Job seekers who use networking are less likely to exhaust unemployment benefits and more likely to become reemployed. However, the effect of networking was not above and beyond other job search methods. For older job seekers, Mor-Barak, Altschuler and Durby (1996) found that social networks are positively related to odds of later employment and job offer. Among family, friends, and other relationships in which individuals can share their problems with, the other relationship was related to the search outcome. Older job seekers who have somebody other than family and friends to talk to and rely on were more likely to receive a job offer and become employed.

The internet is a growing resource for job search; it is changing the job search process for job seekers as well as the recruitment process for employers (Stevenson, 2009). About 12 percent of adults in the U.S. are using the internet for job searching (Day, Janus, & Davis, 2005). Job seekers may find job leads on the online job boards and learn about employers from their websites. Some job search resources targeting older population are also available online (Heidkamp & Van Horn, 2008). With internet job
search, job seekers may find more job opportunities (Van Rooy, Alonso, & Fairchild, 2003) with relatively low cost (Stevenson, 2009). In spite of its popularity, the effect of an internet job search is not yet clear. For instance, Fountain (2005) found that internet job search increased the likelihood of finding a job in the 1998 data, but the relationship was negative in the 2000 data.

Schmit, Amet and Ryan (1993) looked at specific type of a job search behavior called assertive job search. Ability to defend and act on one’s rights, choices and needs can be advantageous in various job search contexts. For instance, it is critical to present oneself as competent to potential employers and acquire as much information about the job lead throughout the search process. Schmit et al. reported that assertive job search increased the odds of being employed among the minimally educated unemployed individuals.

Job seekers also vary in general strategies for searching (Crossley & Highhouse, 2005). Some may use a wide range of sources to gather job information (exploratory search), whereas others may focus their search effort on selected employers (focused search) or take a trial-and-error approach and passively collect job information (haphazard search). Among the three strategies, the exploratory and focused job search strategies resulted in more job offers (Koen, Klehe, Van Vianen, Zikic, & Nauta, 2010).

In sum, various resources and types of job search have been identified in the previous research. Job seekers utilize resources such as employment centers, social networks and internet to locate the opportunities and apply for jobs. Although the prevalence of specific behaviors may vary and the effectiveness of some job search
behaviors is still debatable, research should pursue further understanding of job search sources and behaviors that would optimally help those in the job market.

*Temporarily Dynamic Conceptualization of Job Seeking Behavior*

Job searching is a dynamic process. Job seekers may not use the same source all the time or keep searching at the same level of intensity. The sequential model of job search, for instance, suggested that job seekers may engage in different types of behaviors as they move through the phases of job search. Soelberg distinguished different phases in a job search process (Soelberg, 1967; Power & Aldag, 1985). Job seekers first identify an ideal job based on qualification and personal values. Next, job seekers develop a job search plan to attain such an ideal job. That is, they explore the ways to generate job alternatives and determine how to allocate their resources. At the search phase, job seekers collect information about jobs and determine if a job fits their criteria. This phase continues until job seekers no longer consider alternatives. Finally, job seekers negotiate and select the best job offer possible.

This sequential conceptualization of job search influenced Blau (1993, 1994) in developing a behavior-based measure of job search. Similar to Soelberg’s planning, job search and choice, Blau identified two categories of job search behaviors in studying turnover process. The first category is a preparatory job search and included behaviors such as reading help wanted/classified ads and preparing a resume. The second category is the active job search. Sending resumes and having job interviews are representative behaviors of this category. Blau (1993) found that active job search behavior is a better predictor of voluntary turnover than preparatory job search behavior. Active job search
was defined as a more involved job search, and job seekers are actually committed to change their jobs.

The nature of the job search may change over time. Barber and colleagues (1994) found that among college graduates, overall job search intensity declined in general and they were less likely to seek information about job availability and more likely to use informal sources over time. Moreover, Wanberg et al. (2005) reported a significant quadratic change in job search intensity over a 20-week period. Intensity changed in a convex pattern; search declined gradually, then it was followed by a slight upward trend. This convex trend was applicable to many of job seeking behaviors including reading job ads, networking, sending resumes, contacting employers and job interviewing.

The pattern of the fluctuation in job search behaviors over time may differ by job seekers. Based on the interviews with those who lost a job, Borgen and Amundson (1987) identified three groups with a considerable variation in unemployment/job search experience over time. The first group consisted of all the male participants and females who are the primary earners. Job seekers in this group experienced a shorter grieving period, an emotional “yo-yo” effect due to repeated rejections by prospective employers, but considered such unsuccessful period as a time to evaluate perspectives and accept themselves. The second group included mainly females who are a secondary earner in their family with secure financial resources. These job seekers considered unemployment as an opportunity to grow and experienced a gradual decline in emotions with an unsuccessful job search. The third group was job seekers who are fresh out from the high school searching for a job under parental pressure. They expected the job search to be an
easy task initially, but experienced frustration and lost interest in searching in face of unfruitful results. This finding suggested that job seekers not only fluctuate in their emotional and job search experience over time but also there are certain individual/group characteristics associated with such experience.

In the current context, some older job seekers may increase their job searching over time as they learn how to search whereas others may maintain a constant level of job searching across time. For others, the intensity of job seeking behaviors may decline over time without successful outcomes. Examining the variability in job search behavior is precursor to model resilience factors.

Hypothesis 1: Older job seekers vary in their intensity of job search.

H1a: Intensity of job search behaviors fluctuates overtime. There is within-person variability in job seeking behaviors over time.

H1b: Older job seekers vary in their intensity of job search assessed at the beginning of study. There is between-person variability in initial level of job seeking behaviors.

H1c: There are different patterns of change in job search intensity among older job seekers. There is between-person variability in patterns of job seeking behaviors over time.

Resilience Factors in Job Search

Resilience factors in this study were the variables that promote job seekers’ perseverance in their search. Previous research has linked a wide variety of variables to search behaviors. According to the meta-analysis by Kanfer and colleagues (2001),
demographic variables, personality, psychological and social factors influenced the extent of job search intensity and effort. Job seekers who are younger, male and with a high level of education were more likely to engage in search behaviors. In addition, those who are extroverted, open and conscientious, in greater financial need and have a stronger commitment to work searched for a job more rigorously. Self-regulatory variables also played a role. Job seekers, who perceived greater personal control over the search process, maintained confidence and possessed a positive self-view were more likely to search. Meta-analytic evidence also suggested social resources such as social support yielded more job search behaviors.

Based on the review of previous literature, the current study focused on three specific variables that may help job seekers keep searching. Specifically, the current study included job search self-efficacy and outcome expectations in accordance with the social cognitive theory. The third factor, social support, was also suggested as a valuable resource for job seekers (Adams & Rau, 2004; Kanfer et al., 2001). Older job seekers who feel confident in performing particular job search tasks, expect that they will find a job, and have support from people around them would be more resilient in the job searching process. The following section reviews above three resilience factors focal to the current study.

*Social Cognitive Theory*

Self-efficacy and outcome expectation were key variables in the social cognitive theory and included in the current study as positive predictors of job search behavior among older job seekers. Social cognitive theory views behavior as interactive
component of the triadic reciprocality. Observed behavior is not solely driven by external factors (environmental, social factors) or only attributable to the person’s characteristics (personality, values), but both. Behavior is not an end-result, but it also acts on these personal and external factors. Therefore, according to the social cognitive theory, the relationships among the three components are reciprocal. The theory highlights the criticality of human capability in evaluating the environment and selecting and executing an appropriate course of actions.

Social cognitive theory has been applied to the career development context. Social cognitive career theory (SCCT, Lent, Brown & Hacket, 1994) highlighted effects of environmental factors and personal factors such as self-efficacy and outcome expectancy on the career development process such as interest, choice of goals and activities and actual performance. Consistent with the triadic reciprocality, the previous performance-level and career goal attainment, in turn, influences one’s self-efficacy and outcome expectation.

*Job Search Self-Efficacy*

Social cognitive theory had a significant influence on how job seeking behaviors have been studied. In particular, many studies included self-efficacy in understanding job search behavior (i.e., Kanfer & Hulin, 1985; Saks & Ashforth, 1999). Self-efficacy is a person’s belief that he or she is able to successfully execute behaviors that lead to a target outcome (Bandura, 1977), and it has a critical role in regulating one’s behavior (Bandura, 1986). In the job search context, people who believe in their capability of performing job search tasks are more likely to carry out the action (i.e., Kanfer et al., 2001). Schwab et
al. (1987) also highlighted the importance of self confidence (i.e., self-esteem) in the job search.

According to Bandura (1986), “(E)fficacy involves a generative capability in which cognitive, social, and behavioral subskills must be organized into integrated courses of action to serve innumerable purposes” (p.391). This notion suggests that possession of sufficient skills and abilities may be a prerequisite to perform the tasks, but not necessarily mean that these skills and abilities are used in an effective manner to achieve the goals. For example, job seekers who have access to a computer and know how to use it may not actually send a resume electronically to the prospective employer if they do not feel confident to do so.

Self-efficacy affects behavior across various aspects including choice of behavior, amount of effort spent, persistence and thought patterns (Bandura, 1986). When job seekers feel particularly efficacious with the networking strategy, they are more likely to engage in networking-related behaviors (behavioral choice), use more personal resources toward networking (effort), keep engaging in networking in spite of obstacles (persistence) and focus on relevant information (thought patterns). Those who do not feel efficacious may not be able to discard irrelevant information, worry about failure and dwell into self-criticism and doubt.

Rife and Kilty (1989) reported that discouraged older workers showed lower job search self-efficacy compared to an actively searching group. Although causal direction is not clear, discouragement and low self-efficacy seem to be related. Low job search self-efficacy may contribute to implementing suboptimal search strategy. Job seekers
who are not confident to conduct a job search may use job search strategies and resources that are easy and convenient for them, and neglect to evaluate the effectiveness of these strategies or cultivate new resources.

Judgments on efficacy may vary on generality (Bandura, 1986). Efficacy belief can be a global self-confidence across domains or specific to a task. For instance, Shirom, Vinokur, and Price (2008) studied the effect of global self-efficacy of a reemployment workshop and subsequent employment outcomes whereas Kanfer and Hulin (1985) examined self-efficacy of laid-off workers for specific job search strategies (i.e., finding out job openings, deciding type of job to apply for). Others also asked individuals’ confidence in performing specific job search tasks such as completing job application and preparing resume (i.e., van Ryn & Vinokur, 1992; Wanberg, Watt & Rumsey, 1996). Regardless of the generality, research findings overall suggest a positive effect of self-efficacy in the job search process.

Job search self-efficacy is related to increased search behavior and likelihood of finding a job. According to a meta-analytic evidence, job search self-efficacy was one of the consistent predictors of job search behavior ($r_c=.27$) and employment outcomes (Kanfer et al., 2001). People with high job search self-efficacy were more likely to obtain employment ($r_c=.09$), receive job offer ($r_c=.28$) and experience a shorter search period ($r_c=-.12$). Previous studies showed that job search self-efficacy was positively related to job search behaviors across different measures such as preparatory and active job search behaviors, job search effort (Saks & Ashforth, 1998), and assertive job search (Schmit et al., 1993).
Brown et al. (2006) found that self esteem and proactive personality positively predicted job search self-efficacy. Job search self-efficacy, in turn, was positively and directly related to the number of job offers and interviews and was indirectly indirectly related by increasing the intensity of job search behaviors. Job seekers who are more confident and energized to take actions tend to be confident about their job search skills. In another study, Zikic and Saks (2009) showed how both personal and environmental factors can influence job search self-efficacy. Job seekers who have thoroughly evaluated themselves and their surroundings, have participated in a training, and have access to more career-related resources reported stronger confidence in conducting their job search. These studies suggest that job search self-efficacy is constructed as a dynamic interaction between personal and environmental factors.

More recent studies conceptualized job search self-efficacy as a dynamic time-variant construct, rather than a stable personal characteristic. A longitudinal study by Wanberg and colleagues (2005) reported that job seekers’ confidence in their job search behaviors declined in a 20-week period. The result also showed that there is a significant individual variability in trajectory of job search self-efficacy. Pattern of change over time did not look the same for everyone. More importantly, this study demonstrated that job search self-efficacy positively predicts job search intensity when both are treated as dynamic variables.

As the research findings demonstrated the malleability of job search self-efficacy, this construct has received the special attention as a target of intervention to mobilize personal and social resources in searching for a job. Eden and Aviram (1993) reported
that the self-efficacy workshop has increased job search activities among unemployed individuals. The workshop was especially beneficial for those who had lower self-efficacy in the beginning. Self-efficacy is also related to better reemployment quality in another intervention setting (Shirom, Vinokur, & Price, 2008).

Job search self-efficacy is one of the most frequently studied predictors of job search behaviors. Job seekers who feel confident in their job searching skills are more likely to engage in searching activities and thus increase their opportunities to find a job. With its importance and malleability, some interventions have targeted improvement in self-efficacy among job seekers.

*Outcome Expectation*

The social cognitive theory also suggested a role of outcome expectancy in regulating behavior (Bandura, 1986). Although outcome expectancy does not receive as much attention as self-efficacy, believing that certain action leads to the desired outcome is also an important part of the equation to understand human behavior. The two constructs are intertwined but distinct factors of behavior. Like job search self-efficacy, lower outcome expectation is likely to curtail job search behavior. Job seekers who acknowledge that job search behavior leads to a job would search more and attempt to improve the quality of job search. Without outcome expectation, job seekers who are capable of conducting search behaviors may feel foolish to continue searching.

Outcome expectation is especially important in situations where a performance-outcome link is only loosely associated (Bandura, 1989). Job seekers may send resumes or complete online applications, but may not hear back from the employers for a few
months. Thus, in the job search context, behavior and targeted outcome (i.e., job offer) may not occur in a contingent manner. With a prolonged unsuccessful job search experience, job seekers may feel that they will not find a job regardless of what they do. With repeated rejection after the expense of time and effort, the perceived link between job search behavior and outcome can be severed. Learned helplessness theory suggests that the lack of a perceived relationship between one’s action and outcome would lead to a sense of uncontrollability and depression (Seligman, 1975). When job seekers consider that searching for a job does not lead to the desired outcome, they would feel helpless in the situation and may withdraw from the searching behaviors (i.e., Broman, Hamilton, & Hoffman, 2001).

Difference between outcome expectation and self-efficacy is also evident in considering interventions (Bandura, 1977). Individuals may give up because they are not confident in performing the required behavior (low self-efficacy), or give up because they do not expect that the behavior to lead to the desired outcome (lower outcome expectation). Although both cases result in decreasing behavior, there are different antecedents and implications for interventions. Bandura (1977) discussed that “(T)o alter efficacy-based futility requires development of competencies and expectations of personal effectiveness. By contrast, to change outcome-based futility necessitates change in prevailing environmental contingencies that restore the instrumental value of the competencies that people already possess.” (p. 205).

In sum, outcome expectancy is another dynamic predictor of job search behavior. Job seekers vary in their expectation and assessment on how strongly search behaviors
and outcomes are associated. Confidence in finding a job can change during the course of job searching. Constant rejection from employers, observing others failing to find a job, for instance, may lead job seekers to believe that they are not likely to find a job. On the other hand, this expectation may keep mature job seekers searching for a job instead of becoming discouraged.

Similar to job seeking behavior, job search self-efficacy and outcome expectation were considered dynamic in this context and measured over time. Capturing job search self-efficacy and outcome expectations over time would provide an opportunity to understand the dynamic nature of these variables among mature job seekers. Similar to the first set of hypotheses, Hypothesis 2 and 3 examined variability in job search self-efficacy and outcome expectation over time.

Hypothesis 2: Mature job seekers vary in their job search self-efficacy.

H2a: Mature job seekers’ confidence in conducting job search activities fluctuates over time. There is within-person variability in job search self-efficacy over time.

H2b: Mature job seekers vary in their confidence in searching for a job assessed at the beginning of study. There is between-person variability in mature job seekers’ initial level of job search self-efficacy.

H2c: There are different patterns of change in job search self-efficacy among mature job seekers. There is between-person variability in patterns of job search self-efficacy over time.

Hypothesis 3: Mature job seekers vary in their outcome expectations.
H3a: Mature job seekers’ expectations of finding a job fluctuate over time. There is within-person variability in outcome expectations over time.

H3b: Mature job seekers vary in their expectation of finding a job at the beginning of study. There is between-person variability in mature job seekers’ initial level of outcome expectation.

H3c: There are different patterns of change in mature job seekers’ expectation of finding a job. There is between-person variability in patterns of outcome expectation over time.

Social Support

Social support is one of the critical factors that affect one’s reaction to stress. Social support has been defined as “resources provided by others” (Cohen & Syme, 1985), or “interpersonal transactions involving key elements such as aid, affect, or affirmation” (Antonucci, 1985). As can be seen by these definitions, this resource is interpersonal in nature. Certain behaviors and actions by others create a pool of resources that the job seeker can use to overcome the challenges. Vaux (1988) describes one of the reasons why social support gets attention is its potential for interventions to maximize the use of existing support, develop new social resources, and strengthen supportive behaviors.

There are various ways to conceptualize how social support may influence behavior. One of the ways is to consider social support as coping assistance (Thoits, 1986). Thoits described “Individual’s efforts at stress-management can be supplemented and strengthened by the guiding participation of others in those efforts” (p. 419). In her
view, social support from others runs side by side with individual’s coping effort.

Antonucci and Akiyama (1987) conceptualized a “convoy” of social support for older adults. Convoy members such as family and friends surrounding each person create a protection from adversity.

*Functions and sources.* Social support can have different functions and sources. For instance, House (1981) distinguished four types of support by function: emotional, appraisal, informational, and instrumental. Some people will simply listen to the concern and support what the person does, whereas some people will share information that is useful for the person or share tangible resources such as money. Similarly, Cutrona and Russell (1990) discussed five main functions of social support based on the literature review. Emotional support provides comfort and feeling that the person is cared for. Network support fosters a sense of belonging to a group with common interests, goals, or activities. Esteem support provides affirmation of the person’s worth and competence through positive feedback. Tangible support is also called instrumental support. This type of support often refers to financial assistance or help on physical tasks. Lastly, informational support is knowledge and advice provided by others for the individual to overcome hardship.

Social support may come from a significant other, family members, friends, co-workers, supervisors, or people in the community (House & Kahn, 1985). Abbey, Abramis, and Caplan (1985) showed that social support from different sources may have differential effects on emotional well-being. Among social support from people in general, one particular person, or the closest person, social support from people in general
was related to lower level of anxiety, depression, interpersonal sensitivity, and better quality of life among young adults.

Previous literature on social support also investigated negative social support. For instance, Vinokur and van Ryn (1993) discussed the effect of other individuals’ behaviors that hinder the goal attainment and lower the self evaluation. Although the current study used a positive definition of social support, it should be noted that resources created by others may have negative effect on individuals.

*Social support in job search.* Social support has been found to protect unemployed individuals and job seekers from distress (Mallinckrodt & Fretz, 1988) and poor mental health (Gore, 1978; Vinokur & Caplan, 1987) and to promote better self-view (Walters & Moore, 2002) and increase job seeking behavior (Wanberg et al., 1996; Kanfer et al., 2001; Adams & Rau, 2004). Unemployed adults with low social support reported increasing health issues and perceived economic deprivation over time compared to those with higher social support (Gore, 1978). Mallinckrodt and Fretz (1988) found that social support and financial concerns predict stress level among older professionals. Particularly, a specific type of social support, acknowledgement of one’s abilities and skills (reassurance of worth), was linked to lower stress symptoms, higher self-esteem and locus of control. A study by Walters and Moore (2002) also supported the effect of social support on positive self-evaluation. They found that this relationship was especially strong for females.

Social support has a positive impact on the subsequent job search intensity and outcomes. Meta-analytic evidence also suggested a link between social support and job
search behavior ($r_c=.25$, Kanfer et al., 2001). The extent to which significant others acknowledge the importance of the job search improved attitudes toward job search (Vinokur & Caplan, 1987) and increased intention to search, actual search behaviors and likelihood of being hired (Wanberg et al., 1996). Among retirees who were searching for a job, social support was a significant positive predictor of their job search intensity (Adams & Rau, 2004). Older job seekers who have a social network with confidants were more likely to receive job offers (Mor-Barak et al., 1996).

Although the job search process can be an individualized process, the resources created by others can negate the adverse experience and encourage them to continue their search. Information about job opportunities and a how-to search might be especially critical for those who have not searched for a job for a long time. Emotional support can reduce the negative impact of adversity older job seekers face. They may feel depressed and discouraged temporarily, but those with social support seem to recover from down-time quicker and focus their effort again on job search behavior. In the current study, social support was conceptualized as static variable. Although social support may vary in an extended period of time (i.e., lifespan, Antonucci & Akiyama, 1987), it was not likely to vary in the timeframe proposed for the current study (three months).

Other Covariates of Job Seeking Behavior

Job search self-efficacy, outcome expectation, and social support were the focal resilience factors in the current study. To understand the unique effect of these focal predictors, it is important to account for other factors that have been linked to job seeking behaviors.
Association between unemployment and well-being has been documented in the previous research (i.e., Warr, 1987). Unemployed individuals tend to have poorer psychological well-being (McKee-Ryan et al., 2005). The same meta-analysis also found that those who found a job tended to have better psychological well-being during unemployment than those who did not find a job. In the current study, the affective component of job seekers’ well-being is of particular concern. Heppner and Downing (1982) discussed that many job seekers experience an “emotional roller coaster” during their search. Subjective well-being is a person’s evaluation of his or her general “happiness” and is conceptualized with four components including positive affect, negative affect, global life satisfaction and specific domain satisfaction (Diener, Suh, Lucas, & Smith, 1999). Although subjective well-being is often considered as an outcome, a person’s happiness also has consequences. The previous studies have supported that happy individuals are more likely to succeed (Lyubomirsky, King, & Diener, 2005). Happy individuals may have better quality interactions with others, cultivate more resources such as social support, and cope well with difficulties. In relation to the job search, those who were high in positive affect during the interview were more likely to be called back for the next interview (Burger & Caldwell, 2000).

Another variable that may parallel the job search process is the job seeker’s perceived stress. A prolonged search without fruitful outcomes may frustrate job seekers. For instance, Brasher and Chen (1999) included perceive stress as an important factor for evaluating job search process. These researchers found that the job seekers with higher perceived stress reported a lower starting salary.
Personality variables such as conscientiousness and neuroticism have been linked to the job search process. Job seekers who are high in conscientiousness are more likely to engage in search behaviors and endure a shorter search duration (Kanfer et al., 2001). Neuroticism is also linked to job search behaviors, but negatively (Kanfer et al., 2001). Job seekers with high neuroticism may be more prone to stress that may deter effective search behaviors.

Individual differences in commitment to employment also contribute to variability in the job search experience. People who are highly committed to employment tend to engage in a more intense job search (Kanfer et al., 2001). When unemployed, people with a high work role identification experience better mental health than those who consider the work-role as less significant (McKee-Ryan et al., 2005). Warr and Jackson (1985) found that those who initially reported a strong commitment to the labor market showed a significant decline in mental health during their unemployment. Considering that some older adults remain in the workforce because work is so integrated with their identity (Noonan, 2005), unsuccessful and prolonged job search may have detrimental effects for these people.

Financial need also seems to play a role in job search outcomes. Those who have stronger financial needs search more intensely for a job (Kanfer, et al., 2005). Financial need also becomes a source of strain and impacts job seeker’s mental health (McKee-Ryan et al., 2005). Middle-aged and older job seekers today may experience more financial pressure than younger job seekers (i.e., school graduates) simply because they have larger families and mortgage payments.
Demographic variables such as age, gender, education and race also are related to job search behaviors (Kanfer et al., 2001). For example, younger and more educated people tend to engage in more job seeking behaviors. Although the relationships are fairly weak, these demographic variables help identify at-risk populations in the job search process. The current study also includes employment-related variables that are linked to the job search process. Length of job search has been related to poorer mental health (McKee-Ryan et al., 2005) and a decline in job search. Reasons for job search and job history (i.e., blue-collar vs. white-collar) may also influence patterns of job seeking behaviors, mental health and perceived stress over time.

To extend the previous findings, the current study examined the positive effect of three resilience factors (job search self-efficacy, outcome expectation, social support) on job search behaviors above and beyond the covariates. Subjective well-being, perceived stress, conscientiousness, neuroticism, employment commitment, perceived financial need, employment-related variables and demographic variables were considered as covariates of job seeking behavior in the current study.

**Dynamic Process of Job Search**

Hypotheses 1 through 3 were tested to determine if time-varying conceptualization of job search behavior, job search self-efficacy, and outcome expectation were appropriate. These hypotheses were tested as precursor for the last set of hypotheses testing the effects of resilience factors on job search behavior. Based on the literature review, it was hypothesized that job seekers’ job search self-efficacy, outcome expectation, and social support would be positively related to their job search behaviors.
Hypothesis 4: Each of the resilience factors (Job search self-efficacy, outcome expectation, and social support) has unique effect on job search behavior above and beyond other resilience factors and covariates.

H4a: Job seekers who are confident in conducting job searching activities are more likely to actually engage in such activities.

H4b: Job seekers who are confident in finding a job are more likely to search a job.

H4c: Job seekers with more social support are more likely to search a job. Availability of social support positively predicts mature job seekers’ job seeking behaviors.

Job search framework, resilience literature and the social cognitive theory suggested that the job search is a dynamic process. The increasing number of older workers and job seekers calls for understanding of their job search process and preventive intervention for the negative psychological and physical consequences. Job search self-efficacy, outcome expectation and social support were selected as focal resilience factors for the older job seekers to persist in job searching. Theories and empirical evidences support their link to job search behaviors and relevance for interventions. Using a longitudinal design, the current study was aimed to uncover relationships among job seeking behavior, job search self-efficacy, outcome expectation and social support over time.
Figure 2-1.

Hypothesized job search process among older job seekers including job search behavior, resilience factors and covariates.
CHAPTER III

METHOD

Participants

Participants were recruited from job seekers who attended a job fair in a large Midwestern metropolitan area (September 2009). This job fair specifically targeted job seekers above age 40. The job fair was hosted by a non-profit organization that provides a variety of services to area elderly. Their services include assistance for employment, treatment programs for alcohol and drug problems, healthcare and support programs, and volunteer program for retirees. The job fair was advertised through area newspapers and the organization’s website and flyers. The jobs fair took place twice a year, and on average 1,300 job seekers and 40 employers have attended the job fair in the past. Approximately 1,500 job seekers attended the current job fair.

Participating employers represented various industries such as healthcare, telecommunications, transportation, insurance, education and hospitality. These employers provided positions in areas such as clerical, customer service, accounting, food services, sales, healthcare services, and engineering ranging from entry-level to management. Some employers attending the job fair were specifically interested in hiring older job seekers.
Not all older job seekers were unemployed. Some people were employed at the time of job fair. These older adults may have been searching for a better job opportunity or looking for career change or bridge employment, which is a transition job from full-time career job to full retirement (Feldman, 1994). The data from the previous job fair indicated approximately a third of participants were employed at the time of the job fair. Thus, the job fair captured the sample of active older job seekers in the area. The job fair sample potentially excluded a few groups of older job seekers such as those who were not actively engaging in the job searching and those who primarily used internet or other sources (friends, family, previous employers, employment agency) for their job searching.

A total of 443 individuals completed the Time1 survey at the job fair. After the job fair, 67 individuals were removed for the follow-up phone survey. Among these individuals, 27 failed to respond to most of the survey items, 11 were suspected for random responding, and 28 were under age 40. In the follow up studies, 152 participated at Time 2, 107 at Time 3 and 75 at Time 4. Among the participants, 13 individuals reported that they found a job at Time 2, another 13 found a job at Time 3 and 14 at Time 4.

The final sample size for the current study was 376. Average age was 55.7 ranging from 40 to 84. Among the final sample, 46 percent were male. The majority (73 percent) was White, and 23 percent were Black. About half of the participants (49%) were married and 31 percent reported to have a bachelor’s degree or higher. Twenty-three percent of participants were retired from their main career, and 19 percent were receiving
social security benefits. Some participants had a pension plan (37%) and 401K (35%). Twenty-four percent of the participants were employed at the time of job fair.

The work background of participants varied. Twenty-nine percent had primarily blue-collar job(s) and 61 percent had primarily white-collar job(s). Twenty-four percent were seeking blue-collar jobs and 54 percent were seeking a white-collar job. Preference in work schedule also varied among participants. About half (51%) were looking for full-time position while 19 percent showed preference for a part-time position. Thirty-one percent of the participants reported the schedule “doesn’t matter”. The participants were searching for a job for different reasons. Approximately half the participants (47%) raised lay-off as their reason for job search followed by career change (17%) and health issues (1%). On average, participants have been searching for a job for 7.7 weeks ranging from zero to 48 weeks at the time of job fair (Time 1).

Procedure

Data for the current study was collected across four points of time. First, participants were recruited and asked to fill out a paper-and-pencil survey at the job fair. This survey consisted of feedback for the job fair, both dynamic and static variables of interest, and participant’s contact information. Approximately three weeks after the job fair, all the respondents who returned the survey with a valid phone number were contacted through phone calls. This phone call included questions concerning the variables that are expected to vary within a timeframe of the current study (three months). Participants received two more rounds of phone calls (three and six weeks after the first call) asking the same set of dynamic variables.
**Time 1: Job Fair (September 2009)**

Participants received a paper-and-pencil survey along with a job fair pamphlet at the entrance of the job fair. The survey consisted of feedback for the job fair and dynamic variables (job seeking behaviors, job search self efficacy, outcome expectations, subjective well-being, and perceived stress), static variables (social support, conscientiousness, neuroticism, employment commitment, and perceived financial need), demographic and employment-related variables. The survey was accompanied by a consent letter. The letter described the purpose and nature of the current study and explained that returning the survey was considered as consent to participate. Researchers, four graduate students and two faculty members, staffed a booth (“Feedback Survey Booth”) to collect the survey. Participants were encouraged to complete the survey on-site and return it to the researchers’ booth before they leave. Researchers were available throughout the job fair to explain the purpose of this study and answer any questions participants may have.

**Time 2-4: Phone Calls (Three, six, and nine weeks after the job fair)**

Data collection at Time 2 through 4 was carried out by the call center that is established within this host organization. The call center agents were participating in the customer services training hosted by this organization or had completed the training. A total of seven call center agents were scheduled to handle phone calls for the current study. Each participant, who has provided his/her phone number, was contacted for Time 2 data collection. Phone calls were scheduled in three waves for every three weeks. The call center agents interacted with each participant in accordance with a phone script to
assure consistency. The script was linked to the database, so the agents could enter participant responses as they proceeded in the script. At the beginning of the Time 2 call, the staff explained the purpose of study again and confirmed the participants’ interest in providing information. The questions in the phone calls included the dynamic variables (job seeking behavior, job search self efficacy, outcome expectation, subjective well-being, and perceived stress) and an item asking whether or not the participant found a job after the job fair. Each phone call was estimated to last about 15 to 20 minutes. Time 3 and 4 calls followed the same procedure and included the same set of questions as Time 2 phone survey.

Measures

In the current study, dynamic variables (job seeking behaviors, job search self efficacy, outcome expectation, subjective well-being, and perceived stress) were collected for four waves (Time 1 to Time 4). Static variables (social support, demographic variables, and employment-related variables) were collected only at Time 1. All of the items were listed in Appendix A.

Dynamic Variables

Job seeking behaviors and job search self-efficacy. Participants were asked to indicate a frequency of specific job seeking behaviors over the previous three weeks using a 5-point Likert scale (1=Never, 3=Sometimes, 5=A lot). Asking frequency of various job seeking behaviors has been widely used in previous empirical studies and the summed score was often labeled “job search intensity” (i.e., Blau, 1993; Vinokur & Caplan, 1987). In this study, job seeking behavior was categorized into four groups based
on previous research and subject matter experts’ (SMEs) recommendation. Previous research with a similar sample (i.e., Nakai, Fluckinger, & Snell, 2010) identified three domains of job seeking behaviors among older job seekers: General, Networking, and Internet. Subject matter experts (staff members of the non-profit organization who work closely with older job seekers) reviewed the items and recommended dividing the networking item into two categories: contacting people whom job seekers know (i.e., friends and family) and contacting employers directly. A composite of scores on the four items represents job seeking behaviors. Higher scores indicate that a job seeker engaged in more intense job seeking.

Job search self-efficacy was measured in two ways. Each item asking a frequency of specific job seeking behavior was followed by a question “How confident are you to search for a job in this way?” Participants were asked to respond to this question using a 4-point scale (1=Not at all confident, 2= Slightly confident, 3=Fairly confident, 4=Very confident). Similar measures of job search self efficacy have been used in previous studies and typically ask about confidence in performing specific job seeking behaviors and sum the scores across items (i.e., Saks & Ashforth, 1999; van Hooft, Born, Taris, van der Flier, & Block, 2004). A composite of the four items (one for each job seeking behavior) for each participant represents job search self-efficacy. Higher score indicates that the job seeker is confident about performing the job search.

Following the procedure for measuring job seeking behaviors, a single-item measure assessing overall job search self-efficacy was included as a validity check. This general item (“Overall, how confident are you about being able to conduct your job
search well?”) was adopted from Wanberg et al. (2005). It uses the same 4-point scale as the job search self-efficacy for each search behavior.

Preliminary analyses were conducted to examine internal consistency among four job search items and four job search self-efficacy items. The internal consistency was computed based on valid responses at each time point. The analyses indicated that the four items for job search intensity had a poor internal consistency at Time 1 (α=.552) and it declined over time (T2 α = .421, T3 α = .403, T4 α = .259). Intercorrelations among the four job search behaviors were also low, ranging from .19 to .27 at Time 1. Similarly, the four self-efficacy items corresponding to specific job search behavior had a poor internal consistency (T1 α = .626, T2 α = .385, T3 α = .534, T4 α = .475). Although internal consistency is slightly better than job search items, they are too low to be treated as a single scale. Intercorrelations among four job search self-efficacy items were also low (r=.19 to .39 at Time 1). Specific job search behavior was highly correlated with corresponding self-efficacy but not self-efficacy for other search behaviors.

Based on the preliminary results, four job search items and four job search self-efficacy items were treated as separate variables. This is consistent with findings from the previous research. Wanberg and colleagues (2005) reported that different job search methods showed different trajectories over time. In addition, a study with a similar older job seeker sample suggested internet job seeking behavior may represent a separate component from other job search activities (Nakai, Fluckinger, & Snell, 2010). Instead of examining composite job search intensity and job search self-efficacy, analyses were conducted for each variable separately.
Outcome expectation. Participants’ expectation in finding employment was measured by a single-item (“How confident are you that you can obtain paid work?”). Participants indicated their confidence on a 4-point scale (1=Not at all confident, 4=Very confident). This item was modified from an item used by Wiener, Oei, and Creed (1999) in a study of unemployed individuals. A similar item has been used in Feather and O'Brien (1987).

Subjective well-being. Subjective well-being was measured with positive affect, negative affect and general life satisfaction in the current study. The forth component, domain satisfaction (i.e., satisfaction with family, work, leisure) suggested by Diener and colleagues (1999), was not included for a few reasons. First, it is not clear which domain would affect the job seeking behavior. Second, the specific domain may not be applicable for all the participants. For instance, the older job seekers vary in their employment status and family status. Thus, satisfaction with work and/or family may not be applicable for all of the participants.

Positive and negative affect was measured with the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). Participants were asked to rate 20 adjectives (10 positive, 10 negative) with the extent to which they felt the affective emotions in the past three weeks (1=Not at all, 3=Moderately, 5=Extremely). When the question asked “past few weeks,” the internal consistency was .87 for both positive and negative affect scales (Watson et al., 1988). In the current study, internal consistency was .90 (Time 1), .72 (Time 2), .62 (Time 3), and .75 (Time 4) for positive affect and .90 (Time 1), .75 (Time 2), .81 (Time 3) and .87 (Time 4) for negative affect.
Global life satisfaction was measured with a single-item scale. Participants were asked to indicate how satisfied they are with their life on a scale from 1 to 10 (1=Completely dissatisfied, 10=Completely satisfied). The similar single item measure of general life satisfaction has been used in previous studies (i.e., Lucas, Clark, Georgellis, & Diener, 2004; Oishi, Diener, & Lucas, 2007).

**Perceived stress.** Two measures were adopted to assess a job seeker’s perceived stress regarding the job search experience. First, perceived stress was measured with 6-item scale adopted from the Stress in General (SIG) scale (Stanton, Balzer, Smith, Parra, & Ironson, 2001). The SIG scale was designed to measure perceived stress at the workplace and has two-factors (SIG-I “Pressure” and SIG-II “Threat”). Based on the content and psychometric properties (i.e., better predictors of intention to quit a job), items in SIG-II were adopted. Two changes were made to the original SIG-II scale to measure perceived stress in the job search. First, the instructions were re-written to reflect a participant’s job search experience in the past three weeks. Second, two items that do not fit in the job search context were removed. In the final version of this scale, participants were asked to indicate if each of the six adjectives describes their job search experience (1=No, 2=Maybe, 3=Yes). The list of adjectives includes “Irritating” and “Overwhelming” with two reverse-coded items (“Under control” and “Smooth running”). Higher scores on this scale indicate that job seekers perceive their job search as stressful. In the current study, internal consistency was .72 (Time 1), .47 (Time 2), .53 (Time 3) and .72 (Time 4). Second, overall perceived stress was measured with a single-item adopted from Stanton et al. (2001). Participants were asked to indicate the amount of
stress they felt over past three weeks on a scale of 1 through 10 (1=Not stressed at all, 10=Extremely stressed). Overall stress was measured to check the validity of the multiple-indicator perceived stress scale. Due to the low reliability of perceived job search stress composite score especially at Time 2 and 3, the analysis was conducted using overall perceived stress measure.

Static Variables

Social support. Social support in this study was conceptualized as positive construct. Two social support scales were developed based on the Social Support Items scale (Krause, 1987). Of the four types of social support in the scale (Informational, Tangible, Emotional, Integration), items for Informational and Emotional social support were considered especially relevant for the purpose of the current study. Informational social support in this context refers to how much information about job opportunities and the job search a job seeker may acquire. This can vary from a friend who offers to help revise a resume to a community center program that provides job search training. How the informational support acts as a protective factor for older job seekers also has policy implications to collectively create more effective support system for this population. Emotional social support also has been found to be an important protective factor. Significant other’s affirmation of a job seeker’s searching behaviors had positive impact on job seeker’s mental health (Vinokur & Caplan, 1987).

Five items were selected from each of the original Informational and Emotional scales and re-written to suit the job search context. For each item, participants were asked to indicate how often someone showed a specific behavior for him/her (1=Never,
3=Sometimes, 5=A lot). The informational social support scale contains five statements such as “Suggested some action that you should take in finding a job” and “Helped you understand why you didn’t do something well in searching for a job.” Emotional social support scale included five items such as “Listened to you talk about your job search experience” and “Shared with you how they felt in job searching.” For each scale, a composite of five items indicates amount of social support. Higher score in these scales suggests that job seekers receive more informational and/or emotional social support for their job search. Internal consistency was .73 for emotional social support and .88 for informational social support.

**Neuroticism and Conscientiousness.** Five items for each domain were adopted from the NEO 5 Domains in the International Personality Item Pool (Goldberg, 1999). Neuroticism items included “Rarely get irritated” and “Am very pleased with myself.” Conscientiousness items included “Pay attention to details” and “Make plans and stick to them.” Each participant was asked to respond to how much each statement describes him/her using a 5-point Likert scale (1=Not at all, 3=Somewhat, 5=Very much). Five items for each scale are summed to represent the level of neuroticism or conscientiousness. The scale for neuroticism was scored as emotional stability. That is, lower scores on this scale indicate that job seeker is less emotionally stable, thus high in neuroticism. Higher scores on the conscientiousness scale indicate higher level of conscientiousness for job seekers. Corresponding internal consistency was .67 for Neuroticism and .91 for Conscientiousness.
Perceived financial need. Perceived financial need was measured with a three-item measure based on Vinokur and Caplan (1987). Participants indicated how much they agree with a statement such as “It is difficult for me to live on my total household income right now” using a 5-point scale (1=Strongly disagree, 3=Neutral, 5=Strongly agree). A composite of the three items represents each job seeker’s perceived financial need, where higher score reflects a stronger need for money (α=.88).

Employment commitment. Employment commitment was measured with a 3-item scale based on the Scale of Employment Commitment (Jackson, Stafford, Banks, & Warr, 1983). There are two versions in the original scale (one for employed and another for an unemployed sample); the current study adopted a scale written for unemployed respondents. Participants indicated how much they agree with each of the three statements using a 5-point scale (1=Strongly disagree, 3=Neutral, 5=Strongly agree). The statements included “Having a job is important to me” and “Work makes me feel I’m doing something with my life.” A composite of the three items represents job seeker’s commitment to employment. A higher score reflects a higher commitment to employment (α=.66).

Employment-related variables. A series of variables reflecting job seekers’ job and job search background were included in the current study. The survey included length of job search (in weeks), current employment status (employed/unemployed), retirement from their main career, reasons for searching for a job (lay-off, career change for a better job opportunity, health, never worked outside home), and pension status (social security benefits, pension plan, 401K). Participants were asked to indicate whether
their primary work history and desired job type is blue-collar or white-collar. Although blue-collar and white-collar distinction may be becoming less relevant, it was determined appropriate for the current study based on the previous studies with the similar sample. Finally, participants indicated their desired job schedule (full-time/part-time).

Demographic information. Participants were asked to provide their demographic information including age, gender, ethnic background (White, Black, Hispanic, Asian American, Other), education (some high school, GED, high school diploma, some college, Bachelor’s degree, Master’s degree and above) and marital status (married, single, other). Ethnic background (White, Other), education (No Bachelor’s degree, Bachelor’s degree and above), and marital status (married, other) were dichotomized for the focal data analysis.

Data Analysis Strategy

The current study used a growth curve modeling approach to analyze the longitudinal data. In the growth curve framework, longitudinal data are modeled as two levels. Time (each data wave) is nested within a person. The Level 1 model describes within-person (intra-individual) change over time and the Level 2 model shows between-person (inter-individual) differences in outcome change (Singer & Willett, 2003). The current study explored relationships among dynamic outcome (job seeking behaviors) and time-varying predictors (job seeking self efficacy and outcome expectation) and static predictor (social support) that were conceptualized as constant for each job seeker across time. Growth curve modeling enabled to simultaneously examine within-person changes in outcome variables, effects of time-varying predictors, and between-person
differences in individual characteristics. Thus, growth curve modeling was deemed to be
the appropriate data analysis strategy in the current study.

Each Level 1 predictor in a growth curve model can be modeled as either fixed
(fixed across people) or random (allowed to vary by people). When a Level 1 predictor is
fixed, the predictor is modeled only with a fixed component (γ, average value) in Level 2
equation. On the other hand, when a Level 1 predictor is random, the predictor has both
fixed and random component (μ, a person’s variability from the population mean value).

Test of Dynamic Variables

First three sets of hypotheses (Hypothesis 1, 2 and 3) were aimed to check
whether or not job search behavior, job search self-efficacy and outcome expectation in
the study were actually “dynamic.” That is, these hypotheses examined if each of these
variables has a within-person variability over time and between-person variability in
initial status and patterns of change. As indicated in measures, four types of job search
behaviors and four job search self-efficacy corresponding to each search behavior were
separately examined. Thus, Hypothesis 1 was tested for four search behaviors and
Hypothesis 2 was tested for four job search self-efficacy items. In order to test the
dynamic variables, two models were necessary. First, an intercepts-only model for each
dynamic variable examined if the variable has significant variability. The following
equations represent an intercepts-only model for intensity of job seeking behaviors.

Level1 :     y_{ij} = \beta_{0j} + e_{ij}
Level 2:     \beta_{0j} = \gamma_{00} + \mu_{0j}
$y_{ij}$ is job seeker $j$’s job seeking behaviors at time $i$. $\beta_{0j}$ is an intercept of this model. In this case, $\beta_{0j}$ is job seeker $j$’s average level of job seeking behaviors. The Level 2 equation breaks down $\beta_{0j}$ in two components. $\gamma_{00}$ is average initial level of job seeking behaviors across job seekers and $\mu_{0j}$ reflects an individual’s variability from the overall average. Significant variance in $\mu_{0j}$ ($\tau_{00}$) indicates that job seekers vary in average level of job search behaviors. Finally, in Level 1 equation, $e_{ij}$ is job seeker $j$’s variability from his/her average level of job seeking at time $i$. Variance in $e_{ij}$ is denoted as $\sigma_e^2$. Significant $\sigma_e^2$ means that there is significant level of within-person variability in job seeker $j$’s job seeking behavior. The dependent variable was replaced in the model to examine variability in other dynamic variables.

When a dynamic variable had significant within-person variability, time (data waves) was added at the Level 1 to the intercept-only model. This is called an unconditional growth curve model. Figure 3-1 represents a picture of unconditional growth curve model. The intercept was specified by setting loadings of observed scores of a dynamic variable at four time points to 1. Slope was specified by setting the loadings of Time1 score to 0, Time 2 score to 1, Time 3 score to 2 and Time 4 score to 3. This specification assumed a linear growth of dynamic variable with equal spacing of data collections. Covariance between intercept and slope was also specified. Intercept was set at Time 1. Following are a set of equations that represent an unconditional growth curve model for intensity of job seeking behaviors.

Level 1:

$$y_{ij} = \beta_{0j} + \beta_{1j} \text{Time}_{ij} + e_{ij}$$

Level 2:

$$\beta_{0j} = \gamma_{00} + \mu_{0j}$$
\[ \beta_{1ij} = \gamma_{10} + \mu_{ij} \]

The dependent variable of the Level 1 equation remains the same as in the intercepts-only model; \( y_{ij} \) is job seeker \( j \)'s level of job seeking behaviors at time \( i \). The difference is that all of the coefficients are now adjusted for time. \( \beta_{0j} \) is job seeker \( j \)'s initial level of job seeking behavior after time has been considered (intercept), and \( \beta_{1j} \) is a relationship between time and job seeking behaviors (slope). \( e_{ij} \) refers to within-person variability in job search intensity with time in the model. Significant variance in \( e_{ij} \) for appropriate dependent variable would support Hypothesis 1a (Job search behavior), 2a (Job search self-efficacy), and 3a (Expectation).

In the Level 2 equations, intercept (\( \beta_{0j} \)) has a fixed effect (\( \gamma_{00} \)) and random effect (\( \mu_{0j} \)). \( \gamma_{00} \) is average initial level of job seeking behaviors across job seekers adjusted for time, and \( \mu_{0j} \) reflects an individual’s variability from the overall average. Significant variance of \( \mu_{0j} \) (\( \tau_{00} \)) indicates that job seekers vary in initial level of job seeking after time is controlled. Therefore, significance of \( \tau_{00} \) in the unconditional growth curve model would provide support for Hypothesis 1b (Job search behavior), 2b (Job search self-efficacy), and 3b (Expectation).

Slope (\( \beta_{1j} \)) consists of two components as well. \( \gamma_{10} \) is a fixed effect representing an average relationship between time and job seeking behaviors across job seekers. \( \mu_{1j} \) is a random effect representing job seeker \( j \)'s variability from the average relationship. When variance of \( \mu_{1j} \) (\( \tau_{11} \)) is significant, it indicates that the relationship between time and intensity of job seeking behaviors varies across job seekers. That is, job seekers vary in
slope of job seeking behaviors over time. Significance of $\tau_{ij}$ would support Hypothesis 1c (Job search behavior), 2c (Job search self-efficacy), and 3c (Expectation).

**Search Length**

The participants in this study varied in how long they are searching for a job. Previous studies (i.e., Kanfer et al., 2001) suggested that a period of search length has influence on search behaviors. In order to examine the impact of search length on intercept and slope pattern, search length was included as a covariate in the unconditional growth curve model (Figure 3-2). This model examined whether or not there was significant within-person variability, between-person variability at initial point and in slope when individuals’ search length was controlled.

**Test of Resilience Factors**

Hypothesis 4 examined relationships between resilience factors (Job search self-efficacy, expectation, and social support) and job seeking behavior. First, each of the resilience factors was tested separately. Job search self-efficacy (Hypothesis 4a) and expectation (Hypothesis 4b) were treated as time varying covariates (Muthén & Muthén, 1998-2010). Figure 3-3 is a picture of a growth curve model with a time varying covariate. The relationship between job search self-efficacy and job search behavior at each time point was included in the model. For simplicity, the relationship was modeled as fixed across participants. That assumed that the relationship between job search self-efficacy and job seeking behavior at Time 1 (or 2, 3, 4) did not vary across people. The relationship between outcome expectation and job seeking behavior was examined with the same strategy. When examining a relationship between two dynamic variables
measured simultaneously, there may be an inherent endogeneity problem (Singer & Willett, 2003). That is, causality of the relationship may be unclear. The following models in this study were not aimed to reveal the causality in the relationship between two variables.

Social support in this study was treated as time-invariant predictor (Muthén & Muthén, 1998-2010). Two components of social support, emotional and informational, were expected to be constant during the period of this study. These variables were entered in the model to predict intercept and/or slope of job seeking behavior. The growth curve model of job seeking behavior with informational and emotional support is presented in Figure 3-4.

*Test of Other Covariates*

In order to understand the unique effects of the focal predictors (job search self-efficacy, outcome expectation, and social support) on job seeking behaviors, the possible covariates must be included in the models. Covariates in this study included subjective well-being, perceived stress, neuroticism, conscientiousness, perceived financial need, employment commitment, employment related variables (length of job search, employment status, retirement status, reason for job search, pension status, primary work history, desired job type and schedule), and demographic variables (age, gender, ethnic background, education, and marital status).

Among the covariates of job seeking behavior, subjective well-being and perceived stress were considered as dynamic or time-varying variables. These two dynamic covariates were measured at the same time points as job seeking behaviors.
Similar to job seeking behaviors, job search self-efficacy and outcome expectation, these dynamic covariates were tested for its within-person and between-person variability. All the covariates, both dynamic and static, were examined separately for effect on job search behavior. The covariates that were individually significant predictor of job search behavior were included in the test of overall model. Unique sets of covariates were identified for each of the four search behaviors.

*Test of Overall Model*

The final, and focal, model in this study examined the effect of job search self-efficacy, outcome expectation, and social support above and beyond the appropriate covariates. This model examines if each resilience factor has a unique effect above and beyond the other resilience factors and covariates. Statistical significance of coefficient associated with each resilience factor would indicate its unique effect above and beyond the other resilience factors and covariates.
Figure 3-1.

Unconditional growth curve model with job seeking behavior (JSB) between Time 1 (T1) and Time 4 (T4)
Figure 3-2.

Unconditional growth curve model with job seeking behavior (JSB) between Time 1 (T1) and Time 4 (T4) with search length
Figure 3-3.

Unconditional growth curve model with job seeking behavior (JSB) and job search self-efficacy (JSSE) between Time 1 (T1) and Time 4 (T4)
Figure 3-4.

Unconditional growth curve model with job seeking behavior (JSB) between Time 1 (T1) and Time 4 (T4) with emotional social support (ESS) and informational social support (ISS)
CHAPTER IV
RESULTS

Missing Data

A part of the data, including job search behavior, job search self-efficacy and outcome expectation were collected across four time points over three months. The patterns of missing data and frequency of each pattern were summarized in Table 4-1. There were 34 participants who have completed surveys across four time points. In addition, 49 participants provided their response at three out of four time points, and 102 provided two out of four surveys. The rest (186 to 189 depending on search behavior) only completed survey at Time 1. As the patterns showed, not all the attrition occurred as dropping out. Instead, some of the participants skipped one time of measurement and returned to provide responses. Considering these patterns, missing at random (MAR) was assumed in the current study. All the available data were included for estimation of the models using full information maximum likelihood.

Intercept-Only Model

The intercept-only model was examined separately for all the dynamic variables (four job seeking behavior measures, four job search self-efficacy measures, general self-efficacy, expectation, perceived stress, life satisfaction, positive affect and negative affect). Intercept variance was significant for all dynamic variables. Participants varied in
their initial level of job search behaviors, job search and general self-efficacy, outcome expectation, perceived stress, life satisfaction, and positive and negative affect. Residual variances of intercept-only model were significant for all the dynamic variables. The significance of residual variances allowed for the modeling of the time component for each dynamic variable.

**Unconditional Growth Curve Model**

*Unconditional growth curve model of job seeking behavior*

**Level 1:** \[ y_{ij} = \beta_{0j} + \beta_{1j} \text{Time}_{ij} + e_{ij} \]

**Level 2:** \[ \beta_{0j} = \gamma_{00} + \mu_{0j} \]
\[ \beta_{1j} = \gamma_{10} + \mu_{1j} \]

The unconditional growth curve model incorporated the linear time component into the intercept-only model. First, the unconditional growth curve model was examined for each of the four job seeking behaviors. Both intercept and slope were allowed to vary and covariance between intercept and slope was included in the model. Table 4-2 presents a summary of the unconditional growth curve models for all the dynamic variables in this study. Among the job search behaviors, the latent variable covariance matrix was not positive definite for an item on contacting employers. The slope coefficient was fixed for modeling this item (\( \beta_{1j} = \gamma_{10} \)) so that there were no individual differences in slope pattern modeled across individuals for this type of search behavior.

The intercept coefficient (\( \gamma_{00} \)) and variance (\( \mu_{0j} \)) were significant for all four job seeking behaviors (\( p<.001 \) for all). The level of job search intensity at the initial point, which was set at the job fair, was significantly different from zero and varied by
individuals. Figure 4-1 represents a summary of average intercept and slope for four search behaviors. The slope coefficient was significant only for contacting employers ($\gamma_{10} = -.108, p<.01$). Job seekers are less likely to contact employers over time. Although job search by contacting friends and family and by traditional method also had a negative trend, the coefficients were not statistically significant. In the figure, slope for contacting employers was relatively steeper compared to the other job search behaviors. Contacting friends and family, traditional method, and internet job search showed flatter slopes over three months indicating that job seekers did not change in how frequent they engaged in these search behaviors over this time period. Slope variance was significant for the traditional method ($\mu_{0j} = .12, p<.05$) but not for the other types of job search behavior. This indicates that change in intensity of job search by traditional method over time differs by individuals. The covariance between intercept and slope was not significant for the job seeking behaviors. The initial level of job search intensity was not related to how the intensity changed over time.

Hypothesis 1 stated that older job seekers vary in their intensity of job search in terms of within-person change over time (H1a), between-person difference at the initial point (H1b) and pattern of change over time (H1c). Hypothesis 1a was supported for job search by contacting employers. Job seekers decreased in their search intensity in terms of contacting employers for job information and application over time. Hypothesis 1b was supported for four job search behaviors (contacting friends and family, contacting employers, traditional method, and internet). Older job seekers varied in their job search
intensity at the beginning of study. Finally, Hypothesis 1c was supported for traditional job search. Patterns of using traditional method over time varied among older job seekers.

Unconditional growth curve model of self-efficacy and expectation

The unconditional growth curve model was examined for the four job search self-efficacy measures, general self-efficacy and outcome expectation separately. The time component was first added to the intercept-only model for the self-efficacy variables. The intercept coefficient ($\gamma_{00}$) was significant for general and specific self-efficacy for four types of job behaviors. Intercept variance ($\mu_0$) was significant for general self-efficacy as well as self-efficacy for contacting friends and family, traditional method, and internet. The significance of intercept variance indicates that the level of job search self-efficacy varied across people at the initial point. Job seekers did not vary in confidence of searching for a job by contacting employers. The slope coefficient was significant for self-efficacy in contacting employers ($\gamma_{10}=-.199, p<.001$). This indicates that job seekers lost their confidence in contacting employers for job inquiry across time. Slope variance and covariance between slope and intercept were not significant for general self-efficacy or any of the job search self-efficacy measures.

Hypothesis 2 stated that mature job seekers vary in their job search self-efficacy. Specifically, confidence in conducting job search activities would show within-person change over time (H2a), between-person difference at the initial point (H2b) and pattern of change over time (H2c). Hypothesis 2a was supported for job search self-efficacy in contacting employers. Job search self-efficacy in contacting companies for job inquiry and application declined over time. There was support for Hypothesis 2b for overall self-
efficacy and confidence in searching for a job through friend and family connection, traditional method and internet. At the point of job fair, job seekers varied in how confident they were to conduct these search activities. There was no support for Hypothesis 2c. Change in general or job search self-efficacy did not vary by job seekers.

The intercept coefficient ($\gamma_{00}$) and slope coefficient were significant for general expectation. That is, older job seekers’ initial expectation in finding a job was significantly different from zero and it declined over time ($\gamma_{10}=-.41, p<.001$). Neither intercept variance ($\mu_{0j}$) nor slope variance ($\mu_{1j}$) was statistically significant. Hypothesis 3 stated that older job seekers vary in their outcome expectation. Their expectation declined over time, which provides support for within-person change over time (H3a). There was no support for between-person differences in the initial level of expectation (H3b) or pattern of change over time (H3c).

*Unconditional growth curve model of other dynamic covariates*

Unconditional growth model was examined for dynamic covariates including perceived stress, life satisfaction, positive affect and negative affect. Similar to one of the job seeking behavior (contacting employers), latent variable covariance matrix was not positive definite for these variables. Slope coefficients for these variables were fixed ($\beta_{1j}=\gamma_{10}$). The intercept coefficient and variance were statistically significant for all these variables. Job seekers’ stress, life satisfaction, positive and negative affect were significantly different from zero at the initial point and varied by individuals. Slope coefficients for these variables were also significant. While level of perceived stress
decreased over time ($\gamma_{10} = -.24, p<.01$), life satisfaction ($\gamma_{10} = -.16, p<.05$), positive affect ($\gamma_{10} = -.05, p<.05$), and negative affect increased ($\gamma_{10} = -.08, p<.01$).

**Growth Curve Model Controlled For Job Search Length**

Level 1: $$y_{ij} = \beta_{0j} + \beta_{ij} \text{Time}_{ij} + e_{ij}$$

Level 2: $$\beta_{0j} = \gamma_{00} + \gamma_{01} \text{Search Length}_j + \mu_{0j}$$

$$\beta_{ij} = \gamma_{10} + \mu_{ij}$$

Participants varied in job search length ranging from just started up to 48 weeks at Time 1, and this information was incorporated in the model as a predictor of intercept variance for all the dynamic variables. The results of this model represent intercept and slope coefficients and variances where effect of search length was statistically controlled for. Results from the modeling with job search length were summarized in Table 4-3.

Job search length was significant for traditional job search ($\gamma_{01} = .018, p<.05$). How long job seekers are in the job market was positively related to how much they are searching using traditional method at the time of job fair. Search length also explained intercept variability in job search self-efficacy for traditional method ($\gamma_{01} = .012, p<.05$) and expectation ($\gamma_{01} = -.012, p<.05$). The longer one’s search has been, the higher the self-efficacy for job searching using a traditional method at the initial point. On the other hand, expectation was lower for those who have been in the job market longer. In sum, job search length explained between-person variance at the beginning of their search for traditional job search behavior, corresponding job search self-efficacy and expectation.

The addition of a covariate has an impact on the whole model as it changes the frame or focus on the dependent variable. Thus, the intercept and slope coefficients and
variances were compared before and after inclusion of job search length in each model of the dynamic variables. There were no notable changes in intercept coefficients or variances for any of the dynamic variables. The slope coefficients were in the same direction as the unconditional growth curve models for all except that it became non-significant for positive affect ($\gamma_{10} = .04$, $p = .18$). When job search length was controlled for the positive trend of positive affect was no longer significant. Slope variance for the traditional search method remained significant ($\mu_{1j} = .11$, $p < .01$). In addition, the slope variance became significant for search behavior by contacting friends and family ($\mu_{1j} = .06$, $p < .05$), search self-efficacy for contacting friends and family ($\mu_{1j} = .06$, $p < .05$), and expectation ($\mu_{1j} = .06$, $p < .05$). Growth pattern of search behavior and confidence in networking with acquaintances and expectation in finding a job over time varied by job seekers when effect of search length was statistically controlled.

**Resilience Factors for Job Search**

Hypothesis 4 stated that job seekers who are confident in conducting job search activities (H4a), who are confident in finding a job (H4b), and who perceived more social support (H4c) are more likely to actually engage in search behaviors. Effect of resilience factors was examined with and without covariates. First, each dynamic (time-varying) predictor was separately tested for its relationship to job search behavior at Time1 through 4. In addition to general and job search self-efficacy and expectation, four covariates (perceived stress, life satisfaction, positive and negative affect) were treated as dynamic. Second, each static (time-invariant) predictor was separately tested for its relationship to search behavior. One of the resilience factors, social support, was treated
as static. This step provided relationships between search behavior and resilience factors in absence of covariates.

For each job search behavior, an appropriate set of covariates were selected, then resilience factors were examined if they have unique effects above and beyond the covariates. In a covariate-only model, search length and a set of covariates were tested for each behavior. The final model, a resilience factors model, included job search self-efficacy, expectation, emotional and informational social support in addition to the covariate-only model. The resilience factors model for each job search behavior tested the influence of resilience factors above and beyond the covariates and search length.

*Contacting Friends and Family*

First, individual effect of resilience factors and covariates were examined for search by contacting friends and family (Table 4-4 and 4-5). Among the resilience factors, job search self-efficacy for contacting friends and family (Time 1 through 4), expectation (Time 1) and both emotional and informational social support individually predicted this type of search behavior. When both types of social support were examined simultaneously, only emotional support was significant. Among the dynamic covariates, general self-efficacy (Time 1 and 2), perceived stress (Time 1 and 2), positive affect (Time 1, 2, and 3) and negative affect (Time 1 and 2) were significant during the earlier phase. In addition, age ($\gamma_{01}=-.019$, $p<.01$), Social Security benefit ($\gamma_{01}=3.64$, $p<.01$), pension plan ($\gamma_{01}=3.51$, $p<.01$), retirement ($\gamma_{01}=5.46$, $p<.01$), employment commitment ($\gamma_{01}=2.18$, $p<.05$) and perceived financial need ($\gamma_{01}=1.85$, $p<.01$) individually predicted initial level of this type of search behavior. When these significant covariates and search
length were tested simultaneously (covariate-only model), retirement, perceived financial need and positive affect (Time 1, 2 and 3) showed unique effect among the other covariates (Table 4-6). Both intercept and slope variance were significant in this model.

When resilience factors were examined with these covariates, job search self-efficacy (Time 1 through 4), expectation (Time 1 and 4) and emotional social support were significant above and beyond the covariates. Among the covariates, perceived financial need and positive affect at Time 1 remained significant. Job seekers, who are confident in contacting friends and family for job information, perceived more emotional support from others and reported stronger financial need and positive affect at Time 1 used family and friends network for job search. In the resilience factors model, intercept variance was still significant but slope variance was no longer significant.

**Contacting Employers**

Results for job search by contacting employers are summarized in Table 4-7 (dynamic predictors), Table 4-8 (static predictors) and Table 4-9 (covariate-only and resilience factors model). Job search self-efficacy (Time 1 through 4), expectation (Time 1 and 2), and both emotional and informational social support individually predicted this type of search behavior. Emotional support was a significant predictor above and beyond informational social support when both types of support were modeled simultaneously. Among other covariates, general self-efficacy, stress and positive affect showed significant relationship at the first time point. In addition, age ($\gamma_{01}=-.018, p<.01$), gender ($\gamma_{01}=-.269, p<.01$), Social Security benefits ($\gamma_{01}=.304, p<.05$), pension plan ($\gamma_{01}=.412, p<.01$), retirement ($\gamma_{01}=.444, p<.01$), conscientiousness ($\gamma_{01}=.232, p<.01$), employment
commitment ($\gamma_{01}=.260, p<.01$) and perceived financial need ($\gamma_{01}=.095, p<.05$) individually predicted initial level of job search intensity measured by contacting employers. When the individually significant covariates and search length were examined simultaneously, gender, pension plan, retirement and conscientiousness remained statistically significant (Table 4-9). The intercept coefficient and variance as well as slope

Among the resilience factors, only job search self-efficacy was significant when the effect of covariates was controlled for. Job search self-efficacy was significant and positive predictor of job search behavior throughout time points. variance were significant in the covariate-only model for search by contacting employers. In the resilience factors model for contacting employers, only the intercept coefficient remained significant, and gender, retirement status and conscientiousness still predicted job search intensity among covariates. Those who were confident in contacting employers for job inquiry, not receiving Social Security benefits, not retired and conscientious reported higher intensity of this type of job search behavior.

*Traditional Search Methods*

Traditional search method referred to behaviors such as looking at newspaper ads and preparing resume. Results for this type of search method were presented in Table 4-10 (dynamic predictors), Table 4-11 (static predictors) and Table 4-12 (covariate-only and resilient factors model). Among the resilience factors, job search self-efficacy (Time 1 through 4), emotional and informational support each predicted traditional job search behavior. However, neither of the social support measures was significant when examined at the same time. Among the covariates, perceived stress (Time 1 through 3),
negative affect (Time 1 through 3) and life satisfaction (Time 1), conscientiousness ($\gamma_{01}=.172, p<.05$), employment commitment ($\gamma_{01}=.210, p<.05$) and perceived financial need ($\gamma_{01}=.170, <.01$) were individually predictive. Among these individually significant covariates and search length, conscientiousness and perceived stress (Time 1 through 3) remained significant in a covariate-only model (Table 4-12). Intercept coefficient and variance and slope variance were significant in this model.

A resilience factors model for the traditional search behavior showed significant between-person variability in initial search intensity and patterns of change over time. Job search self-efficacy was significant across time points and expectation was significant at Time 2. Contrary to prediction, expectation at Time 2 was a negative predictor of search behavior. That is, those who had low expectation in finding a job engaged in more search behavior at Time 2 above and beyond the covariates. Neither type of social support was significant predictor of traditional search method. Conscientiousness and stress at Time 1 and 2 remained significant covariates. Job seekers who are conscientious, stressed, highly efficacious in traditional search method, and had low expectation in finding a job reported more job search by traditional method.

**Internet**

Finally, job search behavior using the internet was examined with resilience factors and other covariates. Results were summarized in Table 4-13 for dynamic predictors, Table 4-14 for static predictors and Table 4-15 for covariate-only and resilience factors model. When individually examined, job search self-efficacy (Time 1 through 4), emotional and informational social support individually predicted internet job
search behavior. When both types of support were examined simultaneously, only emotional social support remained as a significant predictor. General self-efficacy (Time 1 and 2), perceived stress (Time 1), positive affect (Time 1), age ($\gamma_{01}=-.053, p<.01$), marital status ($\gamma_{01}=-.337, p<.05$), educational level ($\gamma_{01}=.330, p<.05$), Social Security benefits ($\gamma_{01}=1.088, p<.01$) and defined contribution plan ($\gamma_{01}=-.477 p<.01$), retirement status ($\gamma_{01}=.967, p<.01$), employment status ($\gamma_{01}=.428, p<.01$), work history ($\gamma_{01}=.762, p<.01$), conscientiousness ($\gamma_{01}=.313, p<.01$) and neuroticism ($\gamma_{01}=.287, p<.01$) were individually significant. Above significant covariates and job search length were included in a covariate-only model for internet job search behavior. For this model, only intercept variance was significant. Age, retirement status, employment status, work history and conscientiousness remained significant predictor of this search behavior.

In a resilience factors model, job search self-efficacy was a significant predictor of search behavior throughout the time points. However, expectation or social support was significant above and beyond the covariates. Age, retirement status, employment status, and work history among the covariates were significant. Those who were younger, non-retirees, unemployed, with white-collar background and confident in using internet for job search reported more internet job search behavior. Intercept variance for the resilience factors model was significant. After resilience factors and covariates were modeled, there was significant variability among job seekers in terms of initial level search intensity.
Summary

Hypothesis 4 tested the effect of resilience factors above and beyond other covariates. Hypothesis 4a was supported across different types of job search behaviors. Job seekers who were confident in conducting specific search methods actually engaged in the search behavior across time. The relationship between job search self-efficacy and search behavior was consistent over the three-month period above and beyond other resilience factors and covariates. Unlike job search self-efficacy, general self-efficacy only predicted the search intensity at earlier points of time.

Hypothesis 4b predicted a positive relationship between outcome expectation and search behavior over time. There was no support for this hypothesis when the relationship was examined in the presence of other resilience factors and covariates. In the resilience factors model across four search behaviors, expectation was significant for contacting employers (at Time 1 and 4) and for traditional search method (at Time 2). However, these coefficients were negative, which was opposite of the hypothesized direction. Those who reported lower expectation in finding a job engaged in these search behaviors at a few time points.

Hypothesis 4c stated that perceived availability of social support would positively predict job search intensity. Two types of social support, emotional and informational, were examined. Among the resilience factors model for four types of job search behaviors, emotional social support was only significant for contacting friends and family and informational social support was not significant for any of the search behavior when
effects of other resilience factors and covariates were accounted for. Thus, there was a limited support for Hypothesis 4c.
Table 4-1.

Missing Data Patterns and Frequencies for Job Search Behaviors.

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
<th>Time 4</th>
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</tr>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>34</td>
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<td></td>
<td>X</td>
<td></td>
<td>22-23</td>
</tr>
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<td>7</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>186-189</td>
</tr>
</tbody>
</table>

Note. X indicates the data point was present. Blank indicates the data point was missing.

Pattern frequencies varied by four job search behaviors.
Table 4-2.

Unconditional Growth Curve Model for Dynamic Variables.

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<th></th>
<th>Intercept</th>
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<th>Slope</th>
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<td>Variance</td>
<td>Coeff</td>
<td>Variance</td>
<td>Coeff</td>
<td>Variance</td>
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<td>Friends</td>
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<td>.565**</td>
<td>-0.06</td>
<td>0.046</td>
<td>.034</td>
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</tr>
<tr>
<td>Employer</td>
<td>3.436**</td>
<td>.453**</td>
<td>-1.08 **</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>3.434**</td>
<td>.691**</td>
<td>-0.027</td>
<td>0.120*</td>
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<tr>
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<td>-0.128</td>
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<tr>
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<tr>
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<td>0.061</td>
<td>0.002</td>
<td></td>
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<td>5.892**</td>
<td>3.486**</td>
<td>-2.39**</td>
<td>—</td>
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<td></td>
</tr>
<tr>
<td><strong>LS</strong></td>
<td>6.214**</td>
<td>2.117**</td>
<td>0.162*</td>
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<td>—</td>
<td></td>
</tr>
<tr>
<td><strong>PA</strong></td>
<td>3.666**</td>
<td>.199**</td>
<td>0.053</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
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*Note.* I&S=Intercept and slope covariance. JSB=Job search behavior. JSSE=Job search self-efficacy. GSE=General self-efficacy. LS=Life satisfaction. PA=Positive affect. NA=Negative affect. *p<.05. **p<.01.
Table 4-3.

Unconditional Growth Curve Model for Dynamic Variables with Search Length.

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<th>Search Length Variance</th>
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<th>JSSE Intercept Variance</th>
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<th>GSE Intercept Variance</th>
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<th>Expectation Intercept Variance</th>
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<th>Stress Intercept Variance</th>
<th>LS Intercept Coeff</th>
<th>LS Intercept Variance</th>
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<td>-.215**</td>
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Note. JSB=Job search behavior. JSSE=Job search self-efficacy. GSE=General self-efficacy. LS=Life satisfaction. PA=Positive affect. NA=Negative affect.

*p<.05. **p<.01.
Table 4.4.

Dynamic Predictors for Job Search by Contacting Friends and Family

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Note. JSB=Job search behavior. JSSE=Job search self-efficacy. GSE=General self-efficacy. LS=Life satisfaction. PA=Positive affect. NA=Negative affect. *p<.05. **p<.01.
Table 4-5.

Static Predictors for Job Search by Contacting Friends and Family.

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*p<.05. **p<.01.
Table 4-6.

Resilience Model for Search by Contacting Friends and Family.

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*Note.  *p<.05.  **p<.01.
Table 4-7.

Dynamic Predictors for Job Search by Contacting Employers.

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Note. JSB=Job search behavior. JSSE=Job search self-efficacy. GSE=General self-efficacy. LS=Life satisfaction. PA=Positive affect. NA=Negative affect. *p<.05. **p<.01.
Table 4-8.

Static Predictors for Job Search by Contacting Employers.

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*p<.05, **p<.01.
Table 4-9.

Resilience Model for Search by Contacting Employers.

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*Note.* *p*<.05. **p*<.01.
Table 4-10.

Dynamic Predictors for Job Search by Traditional Method.

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Note. JSB=Job search behavior. JSSE=Job search self-efficacy. GSE=General self-efficacy. LS=Life satisfaction. PA=Positive affect. NA=Negative affect. *p<.05. **p<.01.
Table 4-11.

Static Predictors for Job Search by Traditional Method.

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<td>3.315**</td>
<td>.622**</td>
<td>-.043</td>
</tr>
<tr>
<td>Work history</td>
<td>3.118**</td>
<td>.663**</td>
<td>-.028</td>
</tr>
<tr>
<td>Cons</td>
<td>2.779**</td>
<td>.632**</td>
<td>-.009</td>
</tr>
<tr>
<td>Neuro</td>
<td>3.276**</td>
<td>.657**</td>
<td>-.013</td>
</tr>
<tr>
<td>EC</td>
<td>2.473**</td>
<td>.656**</td>
<td>-.031</td>
</tr>
<tr>
<td>PFN</td>
<td>2.827**</td>
<td>.645**</td>
<td>-.030</td>
</tr>
</tbody>
</table>


*p<.05. **p<.01.
Table 4-12.

Resilience Model for Search by Contacting Traditional Method.

<table>
<thead>
<tr>
<th></th>
<th>Covariates-Only</th>
<th>Resilience Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coefficient</td>
<td>1.716**</td>
<td>.673</td>
</tr>
<tr>
<td>Variance</td>
<td>.555**</td>
<td>.213**</td>
</tr>
<tr>
<td>Slope</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coefficient</td>
<td>.057</td>
<td>.122</td>
</tr>
<tr>
<td>Variance</td>
<td>.129**</td>
<td>.078**</td>
</tr>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.186**</td>
<td>.117**</td>
</tr>
<tr>
<td>Employment commitment</td>
<td>.021</td>
<td>.041</td>
</tr>
<tr>
<td>Perceived financial need</td>
<td>.103</td>
<td>.036</td>
</tr>
<tr>
<td>Search length</td>
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<td>.002</td>
</tr>
<tr>
<td>T1 stress</td>
<td>.065**</td>
<td>.062**</td>
</tr>
<tr>
<td>T2 stress</td>
<td>.067**</td>
<td>.061**</td>
</tr>
<tr>
<td>T3 stress</td>
<td>.069*</td>
<td>.038</td>
</tr>
<tr>
<td>T4 stress</td>
<td>.019</td>
<td>.009</td>
</tr>
<tr>
<td>T1 job search self efficacy</td>
<td>.665**</td>
<td></td>
</tr>
<tr>
<td>T2 job search self efficacy</td>
<td>.647**</td>
<td></td>
</tr>
<tr>
<td>T3 job search self efficacy</td>
<td>.657**</td>
<td></td>
</tr>
<tr>
<td>T4 job search self efficacy</td>
<td>.657**</td>
<td></td>
</tr>
<tr>
<td>T1 expectation</td>
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<td>T2 expectation</td>
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<td>T3 expectation</td>
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<td>T4 expectation</td>
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<td></td>
</tr>
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<tr>
<td>Informational social support</td>
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</table>

Note. *p<.05. **p<.01.
Table 4-13.

Dynamic Predictors for Job Search by Internet.

<table>
<thead>
<tr>
<th></th>
<th>Intercept Coeff</th>
<th>Intercept Variance</th>
<th>Slope Coeff</th>
<th>Slope Variance</th>
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<th>T2</th>
<th>T3</th>
<th>T4</th>
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<tbody>
<tr>
<td>GSE</td>
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<td>1.509**</td>
<td>.155</td>
<td>.063</td>
<td>.168</td>
<td>.113</td>
<td>.115</td>
<td>.046</td>
</tr>
<tr>
<td>JSSE</td>
<td>1.682**</td>
<td>.202</td>
<td>.016</td>
<td>-.015</td>
<td>.608**</td>
<td>.557**</td>
<td>.622**</td>
<td>.564**</td>
</tr>
<tr>
<td>Expectation</td>
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<td>1.577**</td>
<td>.172</td>
<td>.070</td>
<td>.074</td>
<td>.031</td>
<td>.006</td>
<td>-.073</td>
</tr>
<tr>
<td>Stress</td>
<td>3.258**</td>
<td>1.554**</td>
<td>.142</td>
<td>.084</td>
<td>.062**</td>
<td>.027</td>
<td>.030</td>
<td>.027</td>
</tr>
<tr>
<td>LS</td>
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<td>1.558**</td>
<td>-.119</td>
<td>.060</td>
<td>-.003</td>
<td>.019</td>
<td>.052</td>
<td>.069</td>
</tr>
<tr>
<td>PA</td>
<td>3.022**</td>
<td>1.534**</td>
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<td>.057</td>
<td>.161*</td>
<td>.096</td>
<td>.056</td>
<td>-.013</td>
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<tr>
<td>NA</td>
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<td>1.584**</td>
<td>.054</td>
<td>.077</td>
<td>.085</td>
<td>.042</td>
<td>.073</td>
<td>.082</td>
</tr>
</tbody>
</table>

*Note. JSB=Job search behavior. JSSE=Job search self-efficacy. GSE=General self-efficacy. LS=Life satisfaction. PA=Positive affect. NA=Negative affect. *p<.05. **p<.01.
Table 4-14.

Static Predictors for Job Search by Internet.

<table>
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<tr>
<th></th>
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<td>Coeff</td>
<td>Variance</td>
<td>Coeff</td>
<td>Variance</td>
<td>Coeff</td>
</tr>
<tr>
<td>ESS</td>
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<td>1.286**</td>
<td>.035</td>
<td>.023</td>
<td>.380**</td>
</tr>
<tr>
<td>ISS</td>
<td>2.718**</td>
<td>1.311**</td>
<td>.036</td>
<td>.020</td>
<td>.316**</td>
</tr>
<tr>
<td>ESS&amp;ISS</td>
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<td>1.286**</td>
<td>.035</td>
<td>.023</td>
<td>(E) .354**</td>
</tr>
<tr>
<td>Age</td>
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<td>1.215**</td>
<td>.047</td>
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<td>-.053**</td>
</tr>
<tr>
<td>Gender</td>
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<td>1.359**</td>
<td>.038</td>
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<td>Ethnic</td>
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<td>1.370**</td>
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<tr>
<td>Marital status</td>
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<td>1.363**</td>
<td>.032</td>
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<tr>
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<td>1.357**</td>
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<td>SSB</td>
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<td>1.195**</td>
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<td>Pension</td>
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<td>1.408**</td>
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<tr>
<td>DCP</td>
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<tr>
<td>Retired</td>
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<td>1.164**</td>
<td>.040</td>
<td>.014</td>
<td>.967**</td>
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<td>Emp status</td>
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<td>.762**</td>
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<tr>
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<td>.313**</td>
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<td>.017</td>
<td>.287**</td>
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<td>.201</td>
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<td>PFN</td>
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<td>.016</td>
<td>.078</td>
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</table>

Table 4-15.
Resilience Model for Search by Internet.

<table>
<thead>
<tr>
<th></th>
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<th>Resilience Factors</th>
</tr>
</thead>
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<td>Intercept</td>
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<td></td>
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<tr>
<td>Coefficient</td>
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<td>0.188</td>
</tr>
<tr>
<td>Variance</td>
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<td>0.013</td>
</tr>
<tr>
<td>Covariates</td>
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<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.031**</td>
<td>-.024*</td>
</tr>
<tr>
<td>Marital status</td>
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<td>-.179</td>
</tr>
<tr>
<td>Education</td>
<td>-.018</td>
<td>0.056</td>
</tr>
<tr>
<td>Social security</td>
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<td>0.237</td>
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<tr>
<td>Defined contribution</td>
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<td>-.123</td>
</tr>
<tr>
<td>Retired</td>
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<td>0.338*</td>
</tr>
<tr>
<td>Employment status</td>
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</tr>
<tr>
<td>Work history</td>
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<td>0.564**</td>
</tr>
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<tr>
<td>Conscientiousness</td>
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</tr>
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<td>Search length</td>
<td>0.016</td>
<td>0.010</td>
</tr>
<tr>
<td>T1 job search self efficacy</td>
<td>.603**</td>
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</tr>
<tr>
<td>T2 job search self efficacy</td>
<td>.472**</td>
<td></td>
</tr>
<tr>
<td>T3 job search self efficacy</td>
<td>.469**</td>
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</tr>
<tr>
<td>T4 job search self efficacy</td>
<td>.448**</td>
<td></td>
</tr>
<tr>
<td>T1 expectation</td>
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<td></td>
</tr>
<tr>
<td>T2 expectation</td>
<td>-.042</td>
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</tr>
<tr>
<td>T3 expectation</td>
<td>-.112</td>
<td></td>
</tr>
<tr>
<td>T4 expectation</td>
<td>-.111</td>
<td></td>
</tr>
<tr>
<td>Emotional social support</td>
<td>0.046</td>
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</tr>
<tr>
<td>Informational social support</td>
<td>0.089</td>
<td></td>
</tr>
</tbody>
</table>

Note. *p<.05. **p<.01.
Figure 4-1.

Summary of unconditional growth curve for four job search behaviors.
CHAPTER V
DISCUSSION

The aging workforce not only constitutes older adults at work but also includes those who are seeking a new employment opportunity. The growing share of older adults in the job market and their potentially prolonged job search call for special attention to this population. The current study was conducted with the purpose of revealing the dynamic job search process among older adults. In particular, the current study focused on variables that contribute to the perseverance in their job search. Based on the literature review, job search self-efficacy, outcome expectation and social support were identified as the target resilience factors in this particular context. These variables were also selected for best informing new intervention strategies. A total of 376 older job seekers ranging from age 40 to 84 participated in the 3-month longitudinal study.

The preliminary analysis suggested a distinction among job search methods therefore the four search behaviors including contacting family and friends, contacting employers, traditional search method and internet search were examined separately. First three sets of hypotheses examined if job search behaviors, job search self-efficacy, and outcome expectation could be modeled as dynamic across time. For Hypothesis 1, four job seeking behaviors were tested for their between-person difference at initial point, within-person change over time and between-person difference in patterns of change. Job
seekers varied in how much they engaged each search behavior at an initial point. In
addition, over time job seekers were less likely to contact employers. A significant
variability in growth patterns for traditional search methods indicated that job seekers
varied in change patterns of search behaviors such as looking in newspapers and
preparing resumes. Some increased more, some decreased, and others remained at a
steady level.

Hypothesis 2 and 3 examined the similar within- and between-person variability
in the two resilience factors, self-efficacy and expectation, which were measured over
time. There were significant individual differences in the level of job search self-efficacy
for each of the four search behaviors and general self-efficacy. However, there were no
differences across individuals regarding their expectation that their job search would lead
to successful reemployment. A downward trend was found for self-efficacy in contacting
employers and expectation. Over time, job seekers’ search confidence about contacting
employers directly declined as did their confidence that this strategy would be successful.

Finally, as the focal question of the current study, Hypothesis 4 examined the
unique effects of job search self-efficacy, expectation and social support on job search
behaviors above and beyond the other covariates. Among the resilience factors, job
search self-efficacy showed the most consistent positive effect on job search behavior
over time. Job search self-efficacy was positively related to job search behavior across a
three-month period. On the contrary to this hypothesis, expectation of a positive search
outcome showed negative relationship for job search by contacting acquaintances and by
traditional methods for one or two time points. Social support had a positive relationship
to one of the job search behaviors. Emotional social support was positively related to the level of search by contacting friends and family. The results from the current study and implications of the findings are discussed in detail.

*Job Search Behaviors*

*Contacting friends and family*

Talking to family members, relatives and friends may be one of the financially low cost ways to look for a job. The current findings found individual variability in using this method at the job fair. When search length was accounted for, there was a variation in pattern change over time for contacting friends and family. In addition to confidence in carrying out this type of search, positive affect positively predicted the level of search behavior. It can be speculated that job seekers’ positive affect may foster the environment where they can ask people around them for job information. Emotional social support was only significant for this type of search behavior after covariates such as age, perceived financial need, job search self-efficacy and expectation were controlled for. Those who perceive emotional support, confirming their self worth, were more likely to ask about job information with their family and friends. Although the current study does not have data to suggest overlap between source of job information and source of emotional support, it is worthwhile to further investigate the effect of emotional support on job seekers’ intention and actual utilization of family and friendship networks.

*Contacting employers*

The current study distinguished two types of networking behaviors; one with family and friends and the other with potential employers. The decline in contacting
employers over time might be partially explained by the limited pool of potential employers. Barber and colleagues (1994) indicated that job seekers begin with a broader search in order to create a pool of job opportunities then move to a more narrowly focused search. Thus, the decline in search by contacting employers might be simply the reflection of job seekers moving to the different phase of their search. However, an alternative explanation is that job seekers become discouraged with continuous rejection from potential employers. In examining unconditional growth curve model for job search self-efficacy, only self-efficacy for contacting employers showed a significant decreasing trend. Unlike self-efficacy for other job search methods, older job seekers lost confidence in contacting employers for job information or cold calling over time. In addition, the significant negative trend in this type of job search behavior and corresponding self-efficacy persisted after individuals’ search length was accounted for. Among the demographic, work-related and personality variables, gender, retirement status and conscientiousness were related to search by contacting employers above and beyond other covariates. Men, who are not retired, and highly conscientious were more likely to directly call employers. This is somewhat consistent with findings from Wanberg and colleagues (2000) that showed positive correlations between conscientiousness and networking comfort as well as networking intensity among job seekers. Job seekers, who were more conscientious, are more likely to feel comfortable networking for job search and actually engaging in such activities.

*Traditional search method*
Older job seekers varied in initial level and trajectory of traditional job search. Both intercept and slope variances remained significant even after resilience factors and covariates were accounted for. Interestingly, none of the demographic or work-related covariates were related to the level of traditional search method. Only personality variables such as conscientiousness, work commitment and perceived financial need individually predicted this type of search behavior. Perceived stress was a unique predictor of traditional search over time. When job seekers’ stress level is high, they engaged in more traditional search behaviors. In the unconditional growth curve model, stress showed a significant negative trend. That is, overall job seekers showed a decrease in stress over time. Although optimal level of stress can drive search behavior, job seekers may become desensitized and experience lower level of stress in their prolonged search.

Internet job search

Many of the demographic and work-related covariates were related to the level of internet job search. Age, marital status, educational attainment, Social Security benefit, defined contribution plan, retirement and employment status, and work history were individual predictors of search by internet. These demographic findings parallel similar reports on internet usage (Smith, 2010). Younger and more educated individuals are likely to go online. Interestingly, older job seekers with white-collar backgrounds were more likely to engage in internet job search. This might be a reflection of common recruiting strategies by employers for different types of jobs and job seekers’ skills and comfort in using internet for search. Employers may rely more on the internet to recruit
white-collar jobs since job seekers with white-collar background may be more skilled and experienced with the internet in general. This poses a question for situations of recareering. Those who had blue-collar jobs in their work life may want to or have to change to a white-collar job due to overwhelming physical demand or limited opportunities in the blue-collar field. These job seekers may need specific support in utilizing the internet for their job search process.

*Diversity among job search behaviors*

Frequency of four job search behaviors was used to measure the level of search behavior in the current study. Unlike the previous studies, in which a composite score of self-report frequency of various job search behaviors was treated as job search intensity, the current findings suggested the uniqueness of each behavior. First, the four job search behaviors showed poor internal consistency and it declined across time points. This suggests that the initial variability among the search behaviors became more strongly diversified over time.

Second, growth curve analyses demonstrated that there was not much variability in job search behavior in a longitudinal sense over all. Of the four search behaviors, only the traditional search method had a significant and negative trend over time and significant variability in change patterns. These findings suggest that potentially different patterns of development in each behavior. This is consistent with the observations from Wanberg et al. (2005). In their post-hoc analysis of adult search behaviors among individuals unemployed over 18 weeks, six job search behaviors showed different patterns of change. There was a significant convex pattern for reading newspaper,
networking, sending resumes, contacting employers and job interviewing while contacting employment agency showed a concave pattern. The current results did not show significant curvilinear effect for job search behaviors. This is probably attributable to the length of study. Wanberg et al. examined search behavior over five months while the current study spanned three months.

Third, there were differences in how other variables are related to each search behavior. For example, age negatively related to all search behaviors except for the traditional method. Commitment to employment and perceived financial need was positively related to all but internet job search. On the other hand, marital status, educational attainment, defined contribution plan, employment status, work history and neuroticism were covariates that were only significant for the internet search method.

The uniqueness of each search behavior evidenced in the results poses a question regarding the effectiveness of commonly used job search behavior measures for an older population. The diversity among search behaviors may be unique to older adults. Interestingly, this issue has not received much attention in previous research studies. It might be simply because many studies have not focused on an older job seeker sample (i.e., Kanfer et al., 2001). However, the results of this study suggest reexamination of job search measures. If the search behaviors have different antecedents and patterns of change over time, they may also differ in outcomes. Thus, one type of job search behavior is more effective than the others. Search intensity (i.e., Blau, 1994) or perceived search effort (i.e., Ellis et al., 1991) do not reveal such information. The underlying assumption for intensity or effort measure has been that more intensity or effort leads to
positive outcomes, and this assumption has received ample support (Kanfer et al., 2001). However, it is questionable if the “searching more is better” strategy would generalize to older job seekers. For instance, Wanberg et al. (1996) found that higher frequency of search behaviors actually lead to a lower likelihood of reemployment for unemployed individuals above age 40. That is, the more they search, the less likely they are to find a job. These researchers have suggested potential quality differences in job search behaviors by age groups. A more recent study reported that age groups vary in their preferred job search strategies (Heidkamp, Corre, & Van Horn, 2010). Older job seekers were more likely to rely on newspaper classifieds, while younger job seekers were more likely to utilize other resources such as former employers, online job boards and job placement centers compare to older counterparts.

Encouraging “more search” may not necessarily help older job seekers. The research studies must investigate what constitutes “better search” for older adults such as specific job search behaviors that increase the likelihood of employment. Furthermore, the key job search methods should be examined for their effectiveness in different situations. For instance, one type of job search methods might be more useful in certain industries and again, for older adults who are re-careering they may be employing a strategy that is not utilized by the industry they are targeting. As suggested earlier, effectiveness of job search behaviors may vary by age groups. Even among older job seekers, those who are seeking a bridge employment and those who are unemployed and seeking a job to make ends meet may engage in different types of job seeking behaviors with varying success rate.
Resilience Factors for Job Search

Job search self-efficacy

The results demonstrated that job search self-efficacy was the most consistent predictor across time and job search behaviors. This extends the previous findings on positive relationship between job search self-efficacy and search intensity (Saks & Ashforth, 1999; Kanfer et al., 2001; Wanberg et al., 2005). Interestingly, the current findings showed that general self-efficacy was positively related to search behaviors in the beginning but the relationship weakened over time. Although general self-efficacy may be related to the other outcomes such as well-being, boosting job search self-efficacy is more likely to support persistence of the search behavior. The relationship between general self-efficacy and job search self-efficacy should be further explored.

As previously discussed, self-efficacy is a malleable construct that can be modified through interventions (Bandura, 1986). Based on the current findings, training programs that focus on fostering confidence for specific search behavior is recommended for older job seekers. For example, Vuori and Vinokur (2005) examined the effectiveness of a re-employment training program aimed at building confidence for job search behaviors and preparing unemployed individuals for potential setbacks. This one-week training program encouraged an active learning process in which participants identified their own strengths and opportunities, and learned and practiced search behaviors through group activities and role playing.

Bandura (1986) discussed different sources of self-efficacy information. People may perceive their level of efficacy from their own successful experience, observation of
similar others’ success, verbal persuasion convincing them of their abilities, and an optimal level of physiological arousal. Training programs such as the one used in Vuori and Vinokur (2005) may tap into multiple sources of self-efficacy information. For instance, the participants can acquire new search skills by practicing particular job search behaviors they did not feel comfortable executing before and trainers and other participants may acknowledge their abilities and provide encouragement. Reiterating the discussion on job search behaviors, identifying specific job search behaviors and their effectiveness is an important first step to develop interventions to promote behavior specific self-efficacy.

Expectation

Job seekers’ expectation that their job search would be fruitful declined over time. In addition, the length of job search was negatively related to expectation. Job seekers who have been in the job market for a longer period of time reported lower levels of expectation. When expectation was treated as a predictor of job search behaviors, however, the finding was puzzling. Expectation was a negative predictor for some job search behaviors, where those who reported lower expectation searched more. One of the potential explanations is that job seekers who were losing faith in finding a job engaged in whatever they can do to find a job instead of focusing their efforts on new and more effective methods. Another potential explanation would be that job seekers adjusted their expectation for a more realistic view of search process. On average, the older job seekers were in the job market for longer than seven months. In addition, the data for the current study were collected in September 2009 during the economic recession in the U.S.
Considering such prolonged job search period combined with the recession, search behaviors may not be rewarded by immediate outcomes. Being prepared for the long "battle", people may cope better with the search process instead of being discouraged.

Social support

When examined individually, both emotional and informational social support were positively related to all four types of job search behaviors. However, only emotional support was predictive of search by contacting family and friends when other variables were accounted for. In spite of evidences from the previous studies (Kanfer et al., 2001; Adams & Rau, 2004), the unique effect of social support was limited in the current study. Cohen and Willis (1985) have compared buffering or main effect hypotheses for relationship between social support and well-being. They found support for both hypotheses depending on how social support is conceptualized. When it was measured as interpersonal resources, there was evidence that social support buffers the negative influence of stressful events on well-being. On the other hand, the main effect hypothesis was supported when social support was measured as social networks. Although the current study aimed to understand behaviors instead of well-being, the findings of Cohen and Willis may suggest a more complex picture of social support and search behaviors. In the current context, social support did not have strong main effect. This may have occurred because social support may be a more distal factor that influences behaviors through other factors (mediation) or a factor that amplifies the effect of other factors on search behaviors (moderation). Future research efforts that investigate the effects of
social support need to give careful consideration to how this construct is conceptualized in job search context.

*Implications for Interventions*

The current results identified job search self-efficacy as a promising factor to foster resilience among older job seekers. Some job seekers have lost their jobs after a long tenure at one employer, are potentially forced to switch jobs because a kind of job they used to do is no longer available, or are facing unfavorable job market conditions. It is suitable for researchers, practitioners, and policy makers to develop an agenda on how to foster and maintain older job seekers’ confidence. One of the first areas that need to be examined is access to resources. Educational settings such as universities and high schools tend to offer job search resources for graduating students and alumni. These resources may range from workshops for specific topics in job search such as networking and resume writing to job board and campus job fair. However, there is a lack of knowledge on how older job seekers would search for a job. Systematically examining what job search resources are available and actually utilized is a critical question to be answered. For instance, although community job centers offer similar services to universities, older adults may not take advantage of it. Heidkamp et al. (2010), in fact, found that older job seekers are less likely than younger counterparts to utilize job centers and services. Having proper knowledge of how to search for a job and identifying multiple sources of job information may decrease a sense of uncertainty around the search process and foster confidence for specific search strategies.
Interventions can directly target an older adults’ job search self-efficacy (i.e., Vuori & Vinokur, 2005). Training programs should consider both literature of self-efficacy (i.e., Bandura, 1986) and training for older adults (i.e., Sterns & Doverspike, 1989). A recent meta-analysis showed that lecture, modeling, active participation, and a self-paced method uniquely contribute to training effectiveness among older learners (Callahan, Kiker, & Cross, 2003). For instance, these programs can be designed to stimulate active and vicarious experiences through a combination of lecture, modeling and active learning method. Additional training on attributing successful experience might be especially important for the older population. A recent report found that older adults tend to attribute their success to luck instead of their abilities (Heidkamp et al., 2010). Linking success, both large and small, to confidence may be critical.

In addition to content and instructional techniques, the form of training might be important for older job seekers. For instance, Job Club is a behavior-based job search support group and the effectiveness of this approach for older adults has been documented previously (Azrin, 1978; Gray, 1983). In Job Club, job seekers and a trainer meet multiple times per week to learn specific job search techniques and practice through lectures, role-plays and other group exercises. Job seekers, especially long-term unemployed older adults, may be embarrassed to talk about their search process with others. As the current findings provided partial evidence for social support, such situations can create isolation of job seekers from interpersonal resources as well as job-related information and the workforce in general. Job Club among older job seekers may
create a safe environment for older job seekers to share their experiences with similar others and actively participate in the training.

Limitations and Future Studies

A few limitations should be noted for the current study. First, the sample may not include all ranges of older job seekers. As the participants were recruited at the job fair, those who were search primarily on internet might be limited in the sample. Also, those who have already dropped out from the job market may not be present in the sample. Second, a few key measures, such as income and number of dependents, should be incorporated for the future studies. Third, the effect of change in data collection method should be considered in interpreting the results. In the current study, Time 1 data were collected by paper-and-pencil survey and the rest was collected by phone surveys. The change in the method could have influence on variables studied in the study.

The current study informed key studies for the future agenda in understanding and supporting older adults for their job search process. First, identification of job search behaviors effective for older job seekers and potential subgroups is necessary. This requires reexamination of what researchers and practitioners have been referring to as job search behaviors. The repertoire of search behaviors included in the commonly used measure may not reflect what job seekers actually engage in. Qualitative methods may provide further insight into the nature of job search behaviors. For example, Noonan (2005) qualitatively explored older workers’ experiences based on their interviews and identified a rich variety in what work meant for them. In the current context, interviews with job seekers as well as subject matter experts (i.e., career center staff) may help
reveal specific search behaviors that are performed by older job seekers and recommended by the experts. Researchers can then investigate what behavior (or combination of behaviors) is more likely to lead to a job. The gap between recommended and actually performed job seeking behaviors would also provide useful information for interventions.

Second, designing and evaluating programs to increase and maintain job search self-efficacy for the specific behaviors is essential. Instead of creating a new program, which may cost more, existing training programs can emphasize activities that build confidence in job searching. Training of personnel, who provide resources to job seekers, should be considered as well. In addition to “in-class” type of interventions, information on how family and friends can help job seekers might be useful. For instance, exercises for networking and interviews can be designed for a job seeker and another person to complete outside the class. These types of activities will be low cost, relative to in-class training programs, and may encourage job seekers to talk about their job search process with their family and friends that can increase perceived social support. For any type of intervention program, their effectiveness should be evaluated. For job search self-efficacy in particular, it is important to examine how long the positive effect of interventions would last.

Finally, there are a few implications for this research. As discussed earlier, commonly used job search intensity and effort measure should be reexamined for older job seekers. In addition, research must make use of more sophisticated methods to understand differential effectiveness of behaviors and/or behaviors for individual job
seekers. Consistent with a lifespan developmental approach (Sterns & Gray, 1999), a complex and interactive effect of individual differences on one’s career including job searching should be acknowledged. One of the ways to accomplish this purpose would be a shift from variable-centered to person-centered approach. For example, latent variable mixture modeling and latent profile analysis (i.e., Wang & Hanges, 2011) may reveal underlying multiple patterns and subgroups in the data instead of assuming a single pattern that applies across all individuals.
CHAPTER VI
SUMMARY

In spite of the increasing share of older adults in the job market, understanding of this population has been limited. The current study investigated resilience among older job seekers in a longitudinal design. Based on resilience literature and Social Cognitive theory, effects of job search self-efficacy, expectation, and social support were examined for four different job search behaviors: contacting friends and family, contacting potential employers, using traditional methods, and using internet. In this study, a total of 376 adults above age 40 were recruited from a local job fair. They provided a survey at the job fair and were followed up by three phone surveys over 3-month period. The data was analyzed using growth curve modeling.

Hypothesis 1 examined within-person change over time (1a), between-person difference at initial point (1b), and between-person difference in change pattern (1c) for four job seeking behaviors. Hypothesis 1b was supported for all search behaviors. There was between-person variability in job search at initial point. Hypothesis 1a was supported for contacting employers. Job seekers were less likely to contact potential employers over time. Hypothesis 1c received support for traditional search method. There was significant variability in growth patterns for search by traditional methods such as looking in newspapers and preparing resumes.
Similarly, Hypothesis 2 and 3 examined within-person change over time (2a, 3a), between-person difference at initial point (2b, 3b), and between-person difference in change pattern (2c, 3c) for four job search self-efficacy corresponding to four job search behaviors and for outcome expectation. For job search self-efficacy, Hypothesis 2a was supported for efficacy in contacting employers. Similar to the finding from search behavior, job seekers’ confidence in contacting potential employers declined over time. Hypothesis 2b was supported for three out of four types. Job search self-efficacy in contacting employers did not have significant individual differences at an initial point. There was no variability in change patterns over time for any job search self-efficacy. Thus, Hypothesis 2c was not supported. For expectation, Hypothesis 3a was supported but not 3b or 3c. Job seekers had lower expectation over time. There was no individual differences in expectation at the initial point or in change patterns over time.

Hypothesis 4 examined the effect of resilience factors (job search self-efficacy, expectation, and social support) on job search behaviors. When appropriate covariates were controlled, job search self-efficacy was a consistent predictor for job search behavior across types and over time. Those who were confident in carrying out search behavior showed more resilience to keep searching for a job.

The results of the study raised the need to investigate what constitutes “better search” for older job seekers. Job search research has assumed that more search behaviors and effort would lead to the favorable outcomes (i.e., reemployment). However, search behaviors by older adults may be qualitatively different from younger adults. In addition, the current study provided further support for criticality of job search self-efficacy in
search process. Designing and implementing interventions emphasizing development and maintenance of job search self-efficacy are in urgent need.
REFERENCES


APPENDIX A

ITEMS FOR DYNAMIC VARIABLES AND SELECTED STATIC VARIABLES

Dynamic Variables

Job Seeking Behaviors and Self Efficacy

*Frequency of specific job seeking behaviors and Job search self efficacy*

We would like to ask you about your job search over the last three weeks.

1a. How often have you searched for a job by contacting someone you know such as friends, family, and co-workers?
   1. Never
   2. Rarely
   3. Sometimes
   4. Often
   5. A lot

1b. How confident are you to search for a job in this way?
   1. Not at all confident
   2. Slightly confident
   3. Fairly confident
   4. Very confident

2a. How often have you searched a job by directly contacting employers?

2b. How confident are you to search for a job in this way?

3a. How often have you searched for a job by looking at the classified section and preparing and mailing resume to employers?

3b. How confident are you to search for a job in this way?

4a. How often have you searched for a job on the internet and send your resume online?

4b. How confident are you to search for a job in this way?

*Overall job seeking behaviors*

All together, how many hours would you say you spent on your job search in the last three weeks?

*Overall job search self efficacy*

Overall how confident are you about being able to conduct your job search well?

1. Not at all confident
2. Slightly confident
3. Fairly confident
4. Very confident

**Subjective Well-being**

*Positive and Negative Affect*

Using the scale below, please indicate to what extent you have felt this way over the last three weeks.

1. Not at all
2. A little
3. Moderately
4. Quite a bit
5. Extremely

**Positive**

- Interested
- Excited
- Alert*
- Strong
- Inspired*
- Determined*
- Attentive*
- Active*
- Enthusiastic
- Proud

**Negative**

- Guilty
- Scared
- Hostile*
- Distressed
- Upset*
- Irritable
- Ashamed*
- Nervous*
- Jittery
- Afraid*

*Included in the short-form for the phone surveys

**Life satisfaction**

All things considered, how satisfied are you with your life as a whole these days? (10-point scale; Completely dissatisfied = 1, Completely satisfied = 10)

**Perceived Stress**

*Stress in job search*

Do you find your job search stressful? Please indicate “Yes,” “No,” or “Maybe” if each of the following words describes your job search experience:

- Irritating
- Under control (Reverse-coded)
- Hassled
- More stressful than I’d like
- Smooth running (Reverse-coded)
- Overwhelming

**Single-item general stress measure**

Overall how stressed were you over the last three weeks? (10-point scale; Not at all = 1, Extremely = 10)
**Outcome Expectation**

How confident are you that you can obtain paid work?

1. Not at all confident
2. Slightly confident
3. Fairly confident
4. Very confident

**Static Variables**

**Social Support**

Using the scale below, please indicate how often someone did the following for you.

1. Never
2. Rarely
3. Sometimes
4. Often
5. A lot

**Emotional**

- Told you you are doing O.K. in searching a job.
- Listened to you talk about your job search experience.
- Expressed interest in and concern for your job search success.
- Did some activity together with you to help you get your mind off from job search.
- Shared with you how they felt in job searching.

**Informational**

- Told you what they did in job search.
- Suggested some action that you should take in finding a job.
- Given you information on how to search a job.
- Helped you understand why you didn’t do something well in searching a job.
- Introduced you additional resources to find job opportunities.

**Neuroticism**

Using the scale below, please indicate how much the following statements describe you.

1. Not at all
2. A little
3. Somewhat
4. A lot
5. Very much

- Rarely get irritated.
- Seldom feel blue.
- Feel comfortable with myself.
- Am not easily bothered by things.
- Am very pleased with myself.
Conscientiousness
Using the scale below, please indicate how much the following statements describe you.

1. Not at all
2. A little
3. Somewhat
4. A lot
5. Very much

- Am always prepared.
- Pay attention to details.
- Get chores done right away.
- Carry out my plans.
- Make plans and stick to them.

Perceived Financial Need
Using the scale below, please indicate how much you agree with the following statements.

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

- It is difficult for me to live on my total household income right now.
- Not having another job in the next two months create actual hardships for me and my family such as inadequate housing, food, or medical attention.
- Not having another job in the next two months reduce my standard of living to the bare necessities of life.

Employment Commitment
Using the scale below, please indicate how much you agree with the following statements.

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

- Having a job is important to me.
- Work makes me feel I’m doing something with my life.
- I still want to work even if I could get more money on social security than by working.
APPENDIX B
HUMAN SUBJECTS APPROVAL FORM

NOTICE OF APPROVAL

Date: August 28, 2009
To: Yoshie Nakai
200 Granger Road, Unit 11
Medina, Ohio 44256

From: Sharon McWhorter, IRB Administrator

Re: IRB Number 20090805 "Relevance for Mature Job Seekers"

Thank you for submitting your Exemption Request for the referenced study. Your request was approved on August 28, 2009. The protocol represents minimal risk to subjects and matches the following federal category for exemption:

☐ Exemption 2 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior.

☐ Exemption 3 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior not exempt under category 2, but subjects are elected or appointed public officials or candidates for public office.

☐ Exemption 4 - Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens.

☐ Exemption 5 - Research and demonstration projects conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine public programs or benefits.

☐ Exemption 6 - Taste and food quality evaluation and consumer acceptance studies.

Annual continuation applications are not required for exempt projects. If you make changes to the study's design or procedures that increase the risk to subjects or include activities that do not fall within the approved exemption category, please contact me to discuss whether or not a new application must be submitted. Any such changes or modifications must be reviewed and approved by the IRB prior to implementation.

Please retain this letter for your files. If the research is being conducted for a master's thesis or doctoral dissertation, the student must file a copy of this letter with the thesis or dissertation.

Approved consent form/s enclosed

Cc: Andrea Snell - Advisor
Cc: Stephanie Woods - IRB Chair

Office of Research Services and Sponsored Programs
Akron, OH 44325-2102
330-972-7005

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