

THESIS

AGE DIFFERENCES IN COPING WITH JOB LOSS

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ABSTRACT

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Using a national sample of unemployed workers from a range of ages, this study investigated the experience of coping with the stressor of involuntary job loss from an aging perspective. Based on previous research, it was expected that the process of coping with involuntary job loss would differ across the life-span as older workers face unique additional stressors. This study tested: (1) whether older unemployed workers cognitively appraised the loss of their jobs more negatively than younger unemployed workers, (2) whether the use of action-oriented problem-focused job loss coping strategies was stable across age, while the use of distress-reducing emotion-focused job loss coping strategies increased with age, and (3) whether the higher use of emotion-focused job loss coping strategies was positively related to subjective well-being and life satisfaction for older adults. Results indicated that cognitive appraisal of involuntary job loss was perceived as more intense and less reversible as age increased, but age was not related to use of coping strategies and the outcomes of well-being and life satisfaction. This study reviewed and integrated job loss and aging literature. Findings are pertinent for the policies of downsizing organizations, the counseling provided by mental health professions, and the coping of unemployed workers of all ages.

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Job Loss

Over the course of their working lives, many workers face the dire experience of job loss. Job loss is considered an extremely stressful and jarring life event in which paid employment is involuntarily removed from an individual (Latack, Kinicki, & Prussia, 1995). Understanding the experience of job loss holds considerable significance, especially in light of the enormous spike in unemployment rates following the 2008 U.S. economic recession (Borbely, 2009). Considering the impact of mass job loss on workers, their families, their past and future employers, and society as a whole (Hanisch, 1999), it is important to more deeply understand the stressor of job loss.

Although early unemployment research focused on an array of negative physical and psychological consequences associated with experiencing job loss, it has been established through both individual and aggregate-level studies that unemployment has a consistent negative effect on physical and psychological well-being beyond obvious financial hardship (Feather, 1990; Kessler, Turner, & House, 1989; McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Wanberg, 1995). Although making causal inferences is as yet unfounded, unemployment has been related to negative outcomes such as heart disease, mortality, poor mental health, the use of mental health services, and alcohol abuse (Jin, Shah, & Svoboda, 2005).

Responses to job loss. Job loss research has been conducted steadily since the Great Depression and has revealed considerable individual differences in responses to job loss (Leana & Feldman, 1992). To examine this variability, researchers have focused more recently on cognitive appraisal and coping with the stressful experience of this involuntary event (Gowan & Gatewood, 1997; Gowan, Riordan, & Gatewood, 1999; Leana & Feldman, 1992). Cognitive appraisal, according to Lazarus and Folkman's (1984) seminal coping model, refers to an evaluation of a taxing situation and affects subsequent choices of coping strategies. Coping

refers to what a person actually thinks or does to manage the stressor and minimize strain (Lazarus, 1991). Coping is a situationally-specific phenomenon (Latack et al., 1995) and is often used as an umbrella term to describe behaviors, cognitions, or strategies employed in a difficult situation (Schwarzer & Schwarzer, 1996).

Many coping studies have demonstrated large individual variability in appraisal and coping during stressful life situations (Lazarus & Folkman, 1984), as coping with hardships involves complex person-environment interactions (Schwarzer & Schwarzer, 1996). However, the appraisal and coping processes following job loss have received little attention in existing unemployment research, and various endogenous and exogenous variables further contribute to the heterogeneity of responses to job loss (McKee-Ryan et al., 2005). Existing research suggests that age may be a particularly salient variable to explain such differences, as older workers face unique obstacles related to job loss (Hedge, Borman, & Lammlein, 2006). To address this gap identified in the literature, the current study will focus specifically on appraisal and coping processes associated with job loss across the life-span.

Job loss across the life-span. Acknowledging the widely-studied negative outcomes resulting from job loss, it is essential to look beyond the direct consequences of this stressor to understand fully the way in which job loss operates and who may be differentially affected. When examining the relationship between job loss and adverse outcomes, past research has generally statistically controlled for a number of demographic variables, such as age, race, marital status, gender, length of unemployment, and number of dependents (McKee-Ryan et al., 2005). The strategy of controlling for such variables is presumably based on the premise that these individual differences affect the way in which individuals react to the stressor of involuntary job loss. Among these individual difference variables, age is particularly relevant in

the current workforce (Hedge et al., 2006). In the following section, I discuss the importance of examining job loss in the context of aging.

“Graying” of the workforce. The long anticipated demographic influx in older adults accompanying the aging “baby boomer” generation is now upon us (Hedge et al., 2006), stimulating research to better understand and optimize the experience of aging adults in the workforce. It is estimated that by 2015, one in five U.S. workers will be age 55 or older (Avery, McKay, & Wilson, 2007). Thus, the need to understand the aging process and the differential experiences that accompany aging is becoming an increasingly pressing matter for modern organizations (Griffiths, 2003).

Negative consequences associated with job loss among older workers may be diminished among individuals contemplating retirement. However, retirement prospects and voluntary turnover are no longer a reality for many older Americans, as the number of older workers is expected to continuously increase into the foreseeable future (Beehr & Bennett, 2007; Sterns & Miklos, 1995). As Cauchon (2010) recently reported in USA Today, the percentage of Americans ages 55 and older remaining in the workforce is at an all-time high. In a recent meta-analysis, Ng and Feldman (2009) found evidence that older workers voluntarily remained in their jobs more than their younger counterparts, as age was negatively related to voluntary turnover ($r = -.14$). This decreased tendency to voluntarily turnover as age advances suggests that (involuntary) job loss may hold particular importance for older workers. Given the rising age for retirement eligibility, crumbling Social Security benefits, and depletion or extinction of pension programs and retirement savings plans, retirement is simply not as viable an option for many older workers as it once was (Hedge et al., 2006). Because the decision to retire is extremely complex and depends on accumulated wealth, numerous demographic factors, work, and non-

work characteristics (Beehr, Glazer, Nielson, & Farmer, 2000), it is essential to better understand the changing experiences of the aging workforce, and consequently, how to maintain and improve aging workers' participation in the workforce even in the face of job loss (Shultz, Wang, Crimmins, & Fisher, 2010).

Aging workers and job loss. Many factors contribute to older workers' magnified sense of job insecurity and diminished feelings of control during unemployment (Kalil, Ziol-Guest, Hawkley, & Cacioppo, 2010). Aging is associated with increased exposure to stressors, such as losing loved ones, declining physical health, and limited mobility. Although it is clear that normal, age-related physiological changes in the nervous system, immune system, and endocrine system increase older adults' vulnerability to physiological stressors, age-related vulnerability to psychosocial stressors like job loss is much less understood (Aldwin, Yancura, & Boeninger, 2007).

Existing research suggests that vulnerability to job loss is heightened later in life, due to an increased difficulty in finding new opportunities after suffering from job loss (Hedge et al., 2006; Ito & Brotheridge, 2006; Ng & Feldman, 2009). In relation to coping, Leana and Feldman (1992) found that older individuals coping with job loss appraised their situations as less reversible than did younger individuals. Older workers' perceived lower job mobility has been attributed to external barriers such as age discrimination in selection (Sterns & Miklos, 1995), as well as stereotypes pertaining to physical capabilities, cognitive abilities, and overall job performance (Yeung & Fung, 2009), challenges stemming from new demands due to technological changes (Feldman, 2007), and the related issue of age discrimination in access to training and various other developmental opportunities (Maurer, Barbeite, Weiss, & Lippstreu, 2007). Additionally, current changes in globalization, technology, female labor force

participation, higher education, healthcare, pension availability, and economic conditions pose considerable challenges to the future status and stability of older workers (Alley & Crimmins, 2007). As voluntary turnover is negatively related to age (Ng & Feldman, 2009), it is pertinent to explore age differences in response to involuntary job loss.

Job loss appraisal and age. The process of responding to any stressor including job loss consists of several components, with cognitive appraisal holding particular importance in the overall stress process. According to Lazarus and Folkman (1984), cognitive appraisal is an evaluative process in which all aspects of an encounter are evaluated with respect to their significance for well-being. Gowan et al. (1999) identified cognitive appraisal as a critical construct in their model of coping with job loss, although the authors stated that existing research examining cognitive appraisal and job loss is sparse and more studies are needed. The role of cognitive appraisal in the process of coping with job loss is complex (Gowan et al., 1999), as the way in which an individual construes the significance of the job loss event in his or her life is influenced by an array of individual and situational factors (Aldwin, 2007). Age is one such individual factor affecting appraisal of job loss as a stressor, a factor which ultimately may affect both individuals' motivation and ability to cope (Feldman, 2007).

The most widely-used conceptualization of the cognitive appraisal process identifies two general components, primary appraisal and secondary appraisal (Lazarus & Folkman, 1984). In broad terms, primary appraisal of a stressor asks, "how bad is it?" and secondary appraisal asks, "what can I do about it?" In terms of job loss specifically, cognitive appraisal of job loss has been conceptualized as consisting of three components: (a) the intensity of the event in terms of discomfort, disruption, and threat, (b) the causality of the job loss event in terms of self-attributions about the responsibility for one's job loss, and (c) the reversibility of the job loss in

terms of the likelihood of reemployment (Leana & Feldman, 1992; McKee-Ryan et al., 2005). In their meta-analysis, McKee-Ryan et al. identified these three forms of cognitive appraisal as relevant to well-being during unemployment.

Internal versus external attribution of the causality of a devastating life event can affect the appraisal and subsequent coping process. Leana and Feldman (1992) found little internal attribution from laid-off employees, as most attributed the cause of their job loss to external factors such as organizational downsizing or economic recession.

Summary. Cognitive appraisal is an important yet neglected construct in job loss research (Gowan et al., 1999; McKee-Ryan et al., 2005). Due to various internal and external challenges that accompany aging in the modern workforce (Alley & Crimmins, 2007; Sterns & Miklos, 1995), it is pertinent to examine differences in cognitive appraisal of job loss depending on age. Consistent with past research (McKee-Ryan et al., 2005), the present study will statistically control for education, number of years unemployed, and current financial resources. In the present study, the cognitive appraisal of individuals coping with job loss is expected to be more negative with age (Prussia, Fugate, & Kinicki, 2001), expanding upon Leana and Feldman's (1992) finding that older workers appraised their job loss situations as less reversible than younger workers did. Specifically, by using the aforementioned three-component operationalization of job loss appraisal, the present study's examination of the relationship between age and job loss appraisal will be more theory-based and will contribute to the understanding of this relationship from a deeper psychological perspective.

Hypothesis 1. It is expected that older individuals (as compared to younger individuals) who have experienced job loss will: (a) appraise the intensity of the job loss as more severe in terms of discomfort, disruption, and threat, (b) appraise the job loss as having

been caused by external factors more than internal factors, and (c) appraise a lower likelihood of achieving satisfactory reemployment.

Coping with Job Loss

When an individual experiences involuntary job loss, a discrepancy is created between that individual's present and desired state (Latack et al., 1995). Following cognitive appraisal, coping strategies are utilized in an effort to resolve this discrepancy. Although many different conceptualizations of coping exist (Latack & Havlovic, 1992), according to Lazarus and Folkman (1984), coping may be broadly defined as behavioral and cognitive efforts used to manage an appraised stressor. Some general functions of coping are to gather information about the demands of the stressor, reduce tension, and restore a state of equilibrium (Lazarus & Folkman, 1984).

In existing coping research, coping strategies have been conceptualized in a number of different ways. However, in a review of job loss studies (Hanisch, 1999), the most commonly used operationalization of coping with job loss has centered on problem-focused and emotion-focused coping strategies. *Problem-focused coping* involves deliberately mitigating or eliminating the stressor by objectively and analytically taking action. Examples include acquiring additional marketable skills by seeking training, actively searching for new job opportunities, or relocating to another city with better job prospects (Leana, Feldman, & Tan, 1998). In contrast, *emotion-focused coping* involves easing the emotionally distressing feelings caused by the stressor through strategies like avoidance, distancing, or minimizing the problem. Examples of emotion-focused coping with job loss include seeking social support from close others, seeking financial assistance from friends or relatives, or community activism to aid others in the community who are also unemployed (Leana et al., 1998).

Complexities of coping strategies. In response to a stressor, the choice of using problem-focused and emotion-focused coping strategies is complex and dependent on numerous factors. In general, problem-focused coping is more likely to occur when conditions of the stressor are appraised as possible to change by taking action, and emotion-focused coping is more likely to occur when conditions are appraised as more difficult to change. Also, availability of personal and situational coping resources has been positively related to problem-focused coping and negatively related to emotion-focused coping (Kinicki, Prussia, & McKee-Ryan, 2000). However, neither coping style is necessarily superior in all contexts, as the perceived utility of each depends on various personal and situational factors (Latack, 1986; Lazarus & Folkman, 1984; Wanberg, 1997). For example, it may not be advantageous for an individual to engage relentlessly in problem-focused coping behaviors to find a new job despite lacking basic qualifications or an adequate number of available job opportunities, as this coping style may exacerbate the stressor of losing one's job. Similarly, an individual who engages in heavy emotion-focused coping following involuntary job loss may hinder his or her chances of reemployment by not taking enough job-seeking action, thus prolonging the experience of the stressor.

Problem-focused and emotion-focused coping strategies share a complex relationship, as they can both facilitate and impede one another (Lazarus & Folkman, 1984). Also, the use of a single coping strategy or combination of coping strategies can be dynamic (Aldwin, 2007), changing over time based on factors internal and external to the unemployed individual (Wanberg, Hough, & Song, 2002). Although there is no established model to understand the dynamic nature of the coping process throughout the course of unemployment (Kinicki et al., 2000), empirical evidence shows that reactions to job loss and accompanying coping strategies

occur in stages and fluctuate with a feedback loop of discrepancy reduction between actual and desired states. For example, shock or anger initially experienced soon after the event of job loss may be related to increased emotion-focused coping. *Job devaluation* is a common example of an emotion-focused coping strategy at this early stage, as it involves cognitively convincing oneself that there are many more important things in life other than having a job (Kinicki & Latack, 1990). In contrast, if an individual begins to tap his or her available social networks after some time has passed and starts to engage in intense job-search behaviors, this individual would be displaying problem-focused coping strategies centered on the goal of obtaining a new job (Latack et al., 1995; Wanberg et al., 2002).

Latack et al. (1995) Coping with Job Loss Model. More specifically, coping with the particular stressor of job loss has been defined as a person's constantly changing behavioral and cognitive efforts to manage internal or external demands that are associated with unemployment and are appraised as surpassing the resources possessed by the individual (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). Latack et al. (1995) claimed that the majority of job loss research has used generic coping models, without addressing the specific, complex mechanisms through which coping processes are created and subsequently affect crucial outcomes for particular stressors. The current study will consider coping in terms of the specific stressor of involuntary job loss, as coping with involuntary job loss is quite different than coping with other life stressors like divorce or death.

Latack et al. (1995) proposed an integrative control theory model of coping with job loss, incorporating coping theory (Lazarus & Folkman, 1984) with control theory (Edwards, 1992). Latack et al. posited that job loss disrupts the equilibrium between an individual's desired and perceived existing states, causing the individual to engage in coping strategies. The effects of

the coping response alter the disequilibrium, subsequently causing a feedback loop for a new, modified coping response. As explained by this theory, the ultimate goal of coping with job loss is to reduce discrepancy so that equilibrium is restored in various disrupted life facets, specifically psychological, physiological, social, and economic facets (Edwards, 1992).

According to the model, an individual who has experienced job loss compares his or her status on four affected life facets (psychological, physiological, social, and economic) with some referent standard or goal. Next, cognitive appraisal of the stressor occurs, in which an assessment is made regarding the degree to which newfound discrepancies are perceived as harm, loss, or threat.

Following appraisal, coping goals are formed, goals that ultimately lead to coping strategies (Latack et al., 1995). Coping strategies have been conceptualized in several different ways, including a focus on particular populations, focus on specific stressful situations, focus on coping over time, or an overarching general focus (Schwarzer & Schwarzer, 1996). However, the coping process outlined in this model is specific to the situation of job loss and is affected by coping efficacy, duration of job loss discrepancy, and coping resources. Specifically, coping efficacy is an individual's belief that he or she possesses the capability of controlling a specific situation which poses threat. Duration of job loss discrepancy affects both job loss appraisal and coping. Although the loss of one's job is a discrete event, appraisal of the job loss duration can range from grave and potentially permanent to temporary and reversible. Beyond appraisal, duration of unemployment affects coping strategies, as unemployed individuals may reassess and adjust coping strategies throughout the process of seeking reemployment. Coping resources can serve to mitigate the harmful impact of involuntary job loss, including individual characteristics and environmental conditions such as high self esteem, social support, or financial resources.

Temporally, coping resources tend to be robust shortly after the event of job loss but become depleted over time during the duration of unemployment (Latack et al., 1995).

Coping with Job Loss and Age

According to a recent meta-analysis centered on well-being during unemployment (McKee-Ryan et al., 2005), existing studies examining the relationship between age and physical and psychological well-being during unemployment have reported contradictory findings, including positive, negative, and insignificant relationships. In response to such inconsistent meta-analytic findings, McKee-Ryan et al. (2005) argued that the most important current gap in unemployment research is understanding how individuals cope with job loss differently, how these differences in coping may be differentially beneficial, as well as how moderating or mediating characteristics of individuals may affect this coping process. In order to address these gaps identified in the literature, the current study will focus specifically on coping with job loss across the life-span.

In order to examine coping with job loss across a range of ages, it is necessary to understand the interplay between coping with job loss and more general age-related differences in coping. While a considerable body of research has examined differences in coping with various stressors across the life-span (Aldwin et al., 2007; Boerner & Jopp, 2007; Riediger, Li, & Lindenberger, 2006), there is a notable dearth of studies focusing on the relationship between age and coping specifically with job loss (Hanisch, 1999). In order to examine coping with job loss across the life-span, it is necessary to supplement the Latack et al. (1995) coping with job loss model with theories focusing on coping from a developmental perspective. The most prominent theories examining differences in coping across the life-span are explained in the following section.

Life-span coping theories. In addition to Lazarus and Folkman's (1984) seminal contributions to the coping literature, coping has also been extensively studied in the context of life-span development in the realm of aging research. Advancing age is naturally accompanied by major life changes, limitations, and losses; stressors that result from various developmental phenomena that span numerous domains of functioning (Riediger et al., 2006). For example, age-related changes in physical and cognitive abilities require aging workers to cope with job demands and ergonomic challenges in order to maintain job performance and avoid workplace strains (Hansson, Robson, & Limas, 2001). Outside of the work context, life-span theories of coping have also been utilized to explore age-related differences in coping with a myriad of life stressors, such as decline in vision (Heyl, Wahl, & Mollenkopf, 2007), coping with the cancer screening process (Mehlsen, Jensen, Christensen, Pederson, Lassesen, & Zachariae, 2009), and coping with decline in the ability to perform basic activities of daily living such as housework, cooking, or shopping (Haynes, Heckhausen, Chipperfield, Perry, & Newall, 2009).

Although many studies focusing on the aging workforce have identified general trends in this population, empirical evidence suggests that considerable heterogeneity exists within chronological age groups in regards to reactions to stressors, as well as physical and cognitive abilities, general health status, and various other characteristics related to functioning at work (Barnes-Farrell, 2005; Barnes-Farrell & Piotrowski, 1991). It has been argued that older workers have superior abilities to cope with stressful life experiences due to better use of coping strategies to regulate their emotions (Hansson et al., 2001), and better use of available coping resources (Osipow & Doty, 1985). However, it has also been argued that these observed differences in coping across age groups are a result of a self-selection phenomenon, as workers with poor coping skills may have left the workforce early due to their disproportionately high

level of experienced strains (Barnes-Farrell, 2005). Considering the current demographic shifts regarding the age composition of the workforce (Hedge et al., 2006; Sterns & Miklos, 1995) and the prevalence of job loss as a stressor in today's turbulent economy (McKee-Ryan et al., 2005), it is important to better understand how individuals of all ages cope with job loss by incorporating a life-span perspective.

To explain the extensive age-related variability observed in coping with stressors (Brantstadter & Renner, 1990), several life-span theories have been created to elucidate this phenomenon (Riediger et al., 2006). While these life-span coping theories all endeavor to explain coping processes of aging adults when faced with stressors such as life changes or losses, they each possess unique elements and contain varying amounts of complexity. However, although each life-span coping theory is distinct with unique terminology (Boerner & Jopp, 2007), all theories described below parallel the aforementioned conceptualization of problem-focused and emotion-focused coping strategies quintessentially used in the stress literature (Latack et al., 1995; Leana & Feldman, 1992). Lazarus and Folkman's (1984) problem-focused coping refers to a troubled individual's instrumental actions in attempts to change the person-environment relationship, and emotion-focused coping refers to mainly cognitive changes made by a troubled individual in attempts to assign new meaning to the situation or reduce distressed feelings rather than actually changing the situation directly. Although these broad coping strategy dimensions do not adequately account for the high degree of intraindividual or situational variability in coping (Schwarzer & Schwarzer, 1996), this common conceptualization across several life-span theories allows for an examination of whether the use of these two types of coping strategies differs with age.

The four most current, prominent life-span coping theories (Riediger et al., 2006) are reviewed and contrasted in terms of problem-focused and emotion-focused coping to clarify their conceptual overlap and illustrate their empirical contributions. These are the socioemotional selectivity theory (Carstensen, 1993), the dual-process model of assimilative and accommodative coping (Brandstädter & Renner, 1990), the model of selection, optimization, and compensation (Baltes & Baltes, 1990), and the life-span theory of control (Heckhausen & Schulz, 1995).

Socioemotional selectivity theory. The socioemotional selectivity theory offers a framework to explain changes in social interaction as future time perspective changes with age (Carstensen, 1993). Its basis concerns the motivational consequences of perceived length of time left in one's life. Instead of a simple, linear view of age as a chronological trajectory from birth to death, this theory posits that time is perceived with more complexity in two general categories across the life-span. It is typical to view time as unrestricted during youth; thus one's motivation at this stage is to pursue information, gain knowledge, and engage in new relationships and experiences. In contrast, in later life, motivation changes as time is viewed as more constrained. This theory posits that this more limited view of time in later life changes motivation to focus instead on pursuing emotional satisfaction, enriching existing relationships, investing in resources already in hand, and generally savoring life as it stands.

In this theory, these two primary motivations are defined as *emotion regulation* (related to emotion-related goals and a limited future time perspective) and *knowledge acquisition* (related to knowledge-related goals and an extended future time perspective). Although somewhat parallel to the common conceptualization of emotion-focused and problem-focused coping strategies used in psychology research, the socioemotional selectivity theory incorporates and emphasizes the element of time (Carstensen, Isaacowitz, & Charles, 1999).

Dual-process model of assimilative and accommodative coping. Proposed by Brandtstädter and Renner (1990), the dual process model addresses coping strategies for maintaining a sense of continuity and efficacy in the face of resource losses (or threat of losses). According to this model's framework, people utilize two complementary types of coping, analogous to problem-focused offensive strategies and emotion-focused defensive strategies, in order to reduce discrepancies between actual and desired developmental outcomes (Brandtstädter & Rothermund, 2002). *Assimilation* (i.e. tenacious goal pursuit) involves offensive, active, and purposeful efforts to change life circumstances such that the discrepancy between actual and desired states reduces or disappears. Examples of assimilation include intentional behaviors that actively alter one's situation in order to overcome obstacles and achieve a given goal. *Accommodation* (i.e. flexible goal adjustment) involves defensive efforts towards discrepancy reduction between desired and actual states when a stressor is encountered and assimilation effort is not feasible. Accommodation is accomplished through the unintentional and automatic adjustment of preferences and goals to situational constraints, essentially disengaging from goal pursuit. Downgrading of aspirations, positive reappraisal, self-enhancing comparisons, and goal and preference adjustment are all classified as accommodation. It is assumed that accommodative coping occurs when the costs of compensatory efforts outweigh the benefits (Brandtstädter & Rothermund, 2002). Accommodation helps to maintain a sense of control when coping with the challenge of a seemingly insurmountable stressor. Although it is possible to waver simultaneously between assimilative and accommodative tendencies, they tend to inhibit each other as one ultimately moves towards either attaining a goal or letting go (Brandtstädter & Rothermund, 2002).

Model of selection, optimization, and compensation. In the selection, optimization, and compensation (SOC) theory, Baltes and Baltes (1990) explained coping with developmental gains and losses over various times across the life-span (from childhood to old age). This theory states that as people age, they strive for adaptive development by managing fluctuating internal and external resources and related gains and losses. The SOC theory proposes that successful aging involves the use of SOC strategies that enable management of resources to minimize losses that impair functioning and maximize gains that promote maintenance or growth (Ouweland, de Ridder, & Bensing, 2007).

This adaptive development is achieved through the interaction of three broad mechanisms used to generate, allocate, and release resources. First, *selection* involves narrowing down possibilities from an array of available alternatives and focusing the investment of resources. The theory distinguishes two functionally different types of selection: *elective selection* is used in response to new tasks or demands, whereas *loss-based selection* is used to adjust one's goals as a result of anticipated or actual loss of goal-relevant resources. *Optimization* involves acquisition, enhancement, or application of current resources for the achievement of higher levels of functioning, parallel to action-based problem-focused coping. Finally, *compensation* involves regulation of loss in development. This could involve various compensatory efforts or technological aids to maintain a given level of functioning despite a decline in previously available resources or developmental loss, parallel to emotion-focused coping. The SOC theory states that the use of these three mechanisms can vary depending on the situation, the sociocultural context, individual resources, the domain of functioning, and personal preferences (Baltes, 1997).

Life-span theory of control. From a developmental life-span perspective, the life-span theory of control focuses on the utility of *primary* and *secondary* coping strategies to facilitate goal striving and satisfy a need for control (Heckhausen & Shulz, 1995). These strategies parallel the aforementioned problem-focused and emotion-focused coping strategies. In the life-span theory of control, primary control strategies are optimal when a goal or task can still be accomplished through offensive efforts, and secondary control strategies become necessary to help the individual defensively disengage when a goal is especially challenging or no longer attainable. This theory uses the terms *selectivity* and *failure compensation* to explain the regulatory mechanisms corresponding with these two coping strategies (primary and secondary). Across the life-span, one optimizes expanding goals with growing potential (selectivity) as a primary strategy to gain control over one's environment. However, if such primary efforts are not possible or fail, this theory posits the use of secondary strategies (failure compensation), in which one restricts goals with declining control potential for protection in the face of challenges. When primary control is limited, goal adjustment can occur through modifying the task, seeking help to complete the task, or disengaging from the task.

Further, Heckhausen and Shulz (1995) posited that selectivity of resource investment and failure or loss compensation are two basic underlying requirements linked to adaptive regulation of control strategies. Consequently, these two requirements (selectivity and compensation) combined with the two fundamental types of control (primary and secondary), produce four distinct developmental coping mechanisms. First, *selective primary control* involves the purposeful investment of resources, like effort or time, into the pursuit of a chosen goal. *Compensatory primary control* involves obtaining external help or technical help to attain a chosen goal. *Selective secondary control* involves the avoidance of distractions or other

hindrances to remain focused on the pursuit of a chosen goal. These three control strategies are akin to problem-focused coping, and past research has shown that they are often correlated with each other and related to subjective well-being (Wrosch, Schulz, & Heckhausen, 2002). Finally, *compensatory secondary control* buffers negative effects of the experienced stressor. This involves distress-reducing strategies such as self-protection from failure with downward social comparisons or external causal attributions, and distancing or complete disengagement from the unattainable goal. Compensatory secondary control is comparable to emotion-focused coping.

Comparison of life-span coping theories. Although all four theories conceptualize optimal use of resources as an adaptive process that changes over the life-span, existing studies utilizing these theories differ in terms of the nature, timing, beneficence, and direction of such coping changes. Many of these variations are due to the diverse methodological differences of the studies examining these theories, as it is difficult to compare age differences in coping across various inconsistent stressors (Aldwin et al., 2007; Boerner & Jopp, 2007; Mehlsen et al., 2009). Thus, several reviews of the theories have concluded that there is not a sufficiently sound empirical basis to adequately test differential hypotheses and to meaningfully integrate these theories into one (Boerner & Jopp, 2007; Riediger & Ebner, 2007).

In existing studies, the models differ widely in terms of their empirical and real-world application. The dual process model is appropriate for use in general or more specific domains, such as the pursuit of various goals pertaining to social, personal, or physical development (Brandtstädter & Rothermund, 1994; Brandtstädter & Rothermund, 2002). This model focuses on the way in which individuals cope with stressful discrepancies between what “is” and what “should be” in their lives. In contrast, the SOC model has mostly been tested with respect to overarching life goal management across various domains (Ebner, Freund, & Baltes, 2006; Jopp

& Smith, 2006), as it was developed as a “meta-theory” with universal application across many levels of analysis (i.e. cellular, individual, societal). However, this life-span theory has also been applied in the specific domain of work (Abraham & Hansson, 1995; Zacher & Frese, in press). Similarly, the versatile socioemotional selectivity theory has been used in a variety of aging and health-related studies (Cartensen, Fung, & Charles, 2003), largely focusing on social relationships (Lang & Carstensen, 1994). Additionally, the socioemotional selectivity theory’s concept of future time perspective has also been used as a framework to study psychological contracts in older workers’ employment relationship and retirement (Bal, Jansen, van der Velde, de Lange, & Rousseau, 2010). Finally, used typically in more narrow application (Riediger & Ebner, 2007), the life-span theory of control is better suited to domain-specific contexts in which an individual is able to control some aspect of his or her life course or environment (Boerner & Jopp, 2007). Examples of real-world contexts in which this theory has been applied include performance of specific activities of daily living (Haynes et al., 2009), age differences in attributions and intensity of life regrets (Wrosch et al., 2002), and academic performance (Hall, 2008).

Utilizing the four previously reviewed life-span theories of coping, many empirical studies have been conducted in various life domains to address the question of developmental coping differences. Although these studies are incongruent in terms of their theoretical bases, samples, stressors, and terminology, they provide a foundation for understanding general trends in coping from a life-span perspective.

Problem-focused and emotion-focused coping across the life-span: empirical findings. As noted above, the current study will examine whether the use of problem-focused and emotion-focused coping strategies differ by age, specifically in individuals coping with job

loss. Although the author is not aware of any existing research utilizing life-span theories of coping to study coping with job loss in particular, the use of life-span theories of coping in a wide-range of coping studies adds value for understanding how coping generally differs by age.

Supporting the positive relationship between age and emotion-focused coping, the emotion-focused shift in motivation over time has received empirical support in a variety of studies (Cartensen et al., 2003). Most notably, Cartensen et al. (2010) conducted an experience-sampling study to examine the developmental course of emotional well-being from early adulthood to old age. Longitudinal findings from a thirteen-year span support the socioemotional selectivity theory's propositions that emotional experiences mature with age, and this maturation is related to improved emotional well-being with advancing age.

Many studies utilizing the framework of the dual-process model to examine coping in later adulthood have found a similar shift from assimilative (problem-focused) to accommodative (emotion-focused) coping, and an increasing adaptiveness of accommodative coping with advancing age (Brandtstädter & Rothermund, 1994; Brandtstädter, Wenture, & Greve, 1993; Heyl et al., 2007; Schmitz, Saile, & Nilges, 1996). The coping model assumes that this shift from assimilative to accommodative coping occurs when the costs of assimilative coping outweigh the benefits of expending relentless effort. Physical, social, and functional losses that typically occur with advancing age all cause a need for adaptation, as the optimal allocation of scarce time and resources becomes increasingly important with age. Consequently, this cost-benefit ratio shift to accommodative coping allows older adults facing limitations to disengage from a goal assessed as being no longer under personal control (Brandtstädter & Rothermund, 2002).

Providing further support, multiple studies examining the SOC theory have demonstrated age-related changes in goal orientation towards emotion-focused type coping, explained as an adaptive mechanism to cope with changing opportunities across the life-span (Ouwehand et al., 2007). The overall usefulness of SOC strategies and the adaptive shift from optimizing gains in young adulthood to maintenance or loss avoidance in old age has been established empirically in several studies (Abraham & Hansson, 1995; Chou & Chi, 2002; Young, Baltes, & Pratt, 2007; Zacher & Frese, in press). For example, Chou and Chi (2002) found that among individuals facing financial problems, optimization and elective selection had a protective effect on life satisfaction. The buffering effects of the SOC strategies seemed to be especially strong in the case of lower coping resources, commonly associated with advancing age (Boerner & Jopp, 2007; Ouwehand et al., 2007). Focusing on coping resources in a work context, Young et al. (2007) found that employees' use of SOC coping strategies was especially beneficial when external resources in the work environment (e.g. family-friendly organizational policies, supervisor support) were low. Finally, in the context of aging, empirical evidence suggests that the use of SOC strategies becomes increasingly important with age (Ouwehand et al., 2007). In a sample of older working adults (ages 40 to 69), Abraham and Hansson (1995) demonstrated that the positive effects of using SOC strategies to maintain job competencies were greatest for the oldest employees. Additionally, Zacher and Frese (in press) found that the use of SOC strategies was positively related to *focus on opportunities*, or new possibilities and goals believed to exist in an individual's personal working future. Although age was negatively related to focus on opportunities in general, SOC strategies buffered this relationship to make older employees better able to maintain a focus on opportunities at work. The SOC theory provides a strong

framework to better understand emotion-focused coping and its relationship with successful aging (Ouwehand et al., 2007).

Lastly, empirical evidence stemming from the life-span theory of control also supports an adaptive age-related increase in compensatory secondary control strategies, parallel to emotion-focused coping. Using a life-span trajectory approach, empirical evidence indicates that compensatory secondary control strategies become more prevalent with age as adults expect to lose their capacity for primary control (Heckhausen & Baltes, 1991; Lachman & Firth, 2004). The increased use of self-protective secondary control strategies is more adaptive in later adulthood when actual prospects for goal attainment may be unfavorable (Heckhausen, Wrosch, & Schulz, 2010), as older adults may have reduced opportunities and less control in goal attainment in domains involving health, family, or career (Haynes et al., 2009). Relevant to problem-focused coping, a recent review of empirical findings based on the life-span theory of control (Heckhausen et al., 2010) found that use of primary control strategies is universally preferred and beneficial across the life-span. For example, older adults with functional constraints who used primary control strategies had lower risk of mortality (Gitlin, Hauck, Winter, Dennis, & Schulz, 2006) and less difficulty with everyday activities (Gitlin, Winter, Dennis, Corcoran, Schinfeld, & Hauck, 2006). However, although use of primary control strategies remains relatively stable in young, middle-aged, and older adults, use of secondary control strategies increases across adulthood (Brandtstädter & Renner, 1990; Heckhausen, 1997; Wrosch, Bauer, & Scheier, 2005).

For example, Wrosch, Heckhausen, and Lachman (2000) examined use of primary and secondary control strategies and subjective well-being in individuals experiencing health or financial stress with participants ranging from 25 to 76 years old. The findings suggest an

overall increased reliance on both primary and secondary control strategies with advancing age. However, persistence in primary control was more strongly related to subjective well-being in young adults as compared to older adults. In addition, several studies suggest that exhibiting unwavering primary control efforts in situations with unfavorable goal attainment is maladaptive for people of all ages (Haynes et al., 2009; Heckhausen et al., 2010). Although persistence is commonly regarded as a desirable virtue related to the achievement of goals and positive life outcomes, disengaging from an extremely difficult or unattainable goal may be most adaptive by lessening strain and allowing resources to be recovered and allocated to other goals that are more realistic (Miller & Wrosch, 2007). For example, in a one-year study of adolescents' use of primary and secondary control strategies in relation to coping with an unattainable goal, adolescents who had difficulty disengaging from unattainable goals (utilizing secondary control strategies) had higher physiological levels of an inflammatory protein related to negative physical health outcomes (Miller & Wrosch, 2007). Similarly, Chipperfield, Perry, and Menec (1999) found that in functionally-limited elderly individuals (age 80 and above), those who used secondary control strategies reported higher well-being than those who used primary control strategies. Although relentless persistence is typically lauded as admirable, the life-span theory of control suggests that secondary control strategies can be adaptive when attainment of a goal is perceived as especially challenging.

The empirical findings based on these four unique life-span theories contribute to the understanding of coping processes from a developmental perspective, although none of these studies were specific to coping with job loss. By integrating the consistent dimensions of problem-focused and emotion-focused coping strategies into the different life-span coping

theories, a clear trend suggests that emotion-focused coping increases with age, and that this increase in emotion-focused coping is adaptive for older individuals.

Whether there are age differences in coping with the stressor of job loss is a timely and important research question, as this topic would enrich coping and aging literature and have practical implications for downsizing organizations and unemployed individuals. The current demographic trend of the “graying” workforce (Barnes-Farrell, 2005) coupled with pervasive layoffs in today’s unstable economy (Brandes et al., 2008) culminate in a pressing need to investigate coping with job loss from an aging perspective. As the author is unaware of any existing studies specifically examining coping with job loss in an aging context, one purpose of the current study is to fill that gap in the literature by examining how coping with job loss differs across the life-span.

Hypothesis 2. It is expected that use of problem-focused strategies for coping with job loss will be stable across age, but the use of emotion-focused strategies for coping with job loss will increase with age. It is expected that the use of these emotion-focused coping strategies will increase in prevalence in later life when problem-focused strategies alone may no longer be sufficient to cope with limitations.

Finally, although issues of causation pose difficulty in drawing conclusions from evidence linking problem-focused and emotion-focused coping strategies to well-being outcomes in unemployed workers (Gowan & Gatewood, 1997; Kinicki & Latack, 1990), problem-focused coping has been consistently related to obtaining reemployment (Hanisch, 1999; Leana et al., 1998). Additionally, according to recent meta-analytic findings, the use of both problem-focused and emotion-focused coping strategies was related to higher well-being among unemployed workers (McKee-Ryan et al., 1995).

Hypothesis 3. While the prevalence of problem-focused coping strategy use is not expected to differ across ages (Heckhausen et al., 2010), it is expected that emotion-focused coping strategy use will be more strongly related to subjective well-being and life satisfaction as age increases. As a result of greater obstacles in goal attainment (reemployment) for older adults, the use of emotion-focused coping strategies is expected to have a protective effect for older adults facing additional challenges.

METHOD

Participants

Sample. 308 unemployed adults participated in a web-based survey as part of the main, quantitative portion of the study. Each participant had lost their job involuntarily, and was actively seeking reemployment. During recruitment, participants were told that they would not receive compensation for completing the initial survey, but that they could receive \$20 if chosen to participate in a phone interview or chosen to participate in a follow up survey. Participants were told specifically that 20 participants would be selected for phone interviews, and 250 participants would be selected for follow-up surveys three months following initial survey completion.

20 unemployed adults participated in the qualitative portion of the study, a semi-structured phone interview. Qualitative data were collected to supplement the quantitative survey results, and to reduce the effects of common-method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Interview participants were selected for participation in the chronological order they volunteered, from the initial quantitative sample of 308. The interviews were completed by the researcher, and the interview participants were mailed \$20 compensation for their time within two weeks of interview completion.

Recruitment. Participants were recruited from Meetup.com and LinkedIn.com groups. Meetup.com is a website which facilitates the creation and organization of local groups in communities throughout the world. With 7.2 million members and 79,000 local groups meeting about various topics worldwide, a recent search with the keyword “unemployed” resulted in 255 Meetup Groups. LinkedIn.com is a website which facilitates social networking among business professionals worldwide, and currently has over 100 million members. LinkedIn members can also create virtual groups about various topics. A recent search with the keyword “unemployed” resulted in 619 LinkedIn Groups.

The web-based present study achieved a national sample by targeting pre-existing meeting groups for job-seeking professionals using these two social networking websites. Each Meetup and LinkedIn Group has an “Organizer,” who serves as the administrator and contact person for the group. The main page for each Meetup and LinkedIn Group contains information about the group’s purpose, upcoming meetings, and any group rules or logistics. Additionally, each group’s page contains a discussion forum where group members can post comments or announcements.

The researcher selected unemployment Meetup and LinkedIn Groups to contact prioritized by largest group membership, with special consideration given to groups designed for older unemployed individuals. The Organizer of each group was directly contacted with a personal message introducing the present study and seeking permission to post a survey link on the group’s page. A total of 103 Meetup and LinkedIn group organizers were contacted, and 32 granted access to the researcher to recruit from their groups. The total membership of the 32 groups accessed by the researcher was 6,989.

With permission granted from the Organizers, the researcher posted a description of the present study and link to the survey on the groups' discussion forums, inviting group members to participate. In some cases, the study description was emailed to the group members directly by the Organizer if the Organizer volunteered to do so. Because some group Organizers sent direct personal messages about the study to their members and other Organizers only allowed the study information to be passively posted on group discussion boards, it is difficult to know precisely how many of the total 6,989 group members actually read the study recruitment message.

Demographic characteristics. 58.1% of participants were female, and 41.9% were male. The majority of the sample identified themselves as White/Caucasian (84.1%), 3.6% identified themselves as Hispanic, 9.4% identified themselves as Black, 2.6% identified themselves as Other, 2.3% identified themselves as Asian, and 1.6% identified themselves as Native American. Participants could select one or more ethnicities, so the total is over 100%. Mean age of participants was 51.9. 11.0% of participants were under 40 years old, 70.5% of participants were between 40-59 years old, and 18.5% of participants were 60 years old or above.

Demographic information pertaining to work and personal history was also reported by study participants. The mean time unemployed was 1.6 years. The sample was highly educated, as 39.0% had a college degree. 33.8% of participants had a graduate degree, 15.6% had some technical/vocational school or some college, 8.4% had a college degree with some graduate school completed, and 3.2% had a high school diploma or GED. Lastly, 51.0% of participants were married, 29.9% were single, 16.2% were divorced, 1.9% were separated, and 1.0% were widowed.

The sub-sample of 20 participants who completed phone interviews was representative of the overall study sample. 50% of phone interview participants were male, and 50% of phone interview participants were female. Mean age of phone interview participants was 48.78.

Procedure

Meetup and LinkedIn Group members who chose to participate were instructed to click on a link to the web-based survey, which was created and administered using Qualtrics online survey software. After clicking the survey link, participants were directed to a page detailing the study's purpose and informed consent. This page also explained that only individuals who involuntarily lost their last jobs and were actively seeking reemployment were eligible to participate. By choosing to click past this initial page, informed consent was obtained.

Although all volunteers were assumed to be unemployed because of their activity in online groups for unemployed, job-seeking professionals, participants were asked one question to verify this before the actual survey was displayed. Participants responded either "yes" or "no" to the question, "Were you laid off from your job involuntarily (i.e. fired, let go, downsized)?" If participants answered "yes," they continued on to the survey content. If participants answered "no," they were directed to a page thanking them for their interest, and telling them that they did not meet the eligibility requirements for the study. To prevent faking from participants who did not meet the eligibility requirements, the IP addresses of participants who answered "no" to this item were permanently blocked by Qualtrics from re-entering the survey. This safeguard prohibited individuals who did not meet the study requirements from participating.

Following survey completion, participants were asked to submit their first name, email address, and telephone number if they were interested in the follow-up surveys, phone interview, or both. Participants were informed that their names and any other identifying information

would be used only for study communication and distributing the monetary compensation. Each participant was assigned a code number, and names remained separate from identifying information in all data analysis to ensure anonymity and confidentiality.

Measures

Overview. All study measures are described below and copies of all measures are included in Table 3.

Cognitive appraisal of job loss. Cognitive appraisal of job loss is conceptualized in the present study as consisting of three components: (a) the intensity of the event in terms of discomfort, disruption, and threat, (b) the causality of the job loss event in terms of self-attributions about the responsibility for one's job loss, and (c) the reversibility of the job loss in terms of the likelihood of reemployment (Leana & Feldman, 1992; McKee-Ryan et al., 2005). As the author is unaware of any single instrument measuring all three components, cognitive appraisal of job loss will be measured using the three scales detailed in the following section.

Intensity appraisal. Intensity of the cognitive appraisal of job loss was measured with two items originally from a study examining cognitive appraisal during an organizational merger (Fugate, Kinicki, & Scheck, 2002). The two items are, (1) "*Overall, the changes in my personal and work life caused by the loss of my job are threatening,*" and (2) "*Overall, the changes in my personal and work life caused by the loss of my job are harmful.*" The items were adapted such that the word "acquisition" was replaced with "loss of my job." Responses were obtained on a five-point Likert scale anchored from *strongly disagree* (1) to *strongly agree* (5). The scores for the two questions were averaged to create an intensity appraisal scale (Fugate et al., 2002). This scale was reverse scored, such that lower scores represented more negative intensity appraisal.

Internal reliability for this scale at two time points was .83 and .92 in past research. The internal consistency of the measure in the present study was $\alpha = .83$.

Causality appraisal. Cognitive appraisal of the causality of job loss was measured with one item from Winefield, Tiggemann, and Smith (1987). The item is, “*What is the main reason you do not have a job now?*” The four response options are: (1) *lack of abilities or skills*, (2) *you didn’t try hard enough*, (3) *the situation you’re in*, and (4) *bad luck*. The first two response options are classified as internal attributions for job loss, and the latter two response options are classified as external attributions for job loss. There is no reliability information available for this single item.

Reversibility appraisal. Cognitive appraisal of the reversibility of job loss, or an individual’s expectations for reemployment, was measured with two items from Feather and O’Brien (1987). The two items are: (1) “*How confident are you about finding the job you really want in the near future?*” and (2) “*How confident are you about finding any kind of job at all in the near future?*” Responses were obtained on a five-point Likert scale anchored from *not at all confident* (1) to *very confident* (5). These variables are called respectively *desired job confidence* and *any job confidence*. Prior internal reliability evidence was unavailable for this scale. The internal consistency of the measure in the present study was $\alpha = .86$.

Coping with job loss. Coping with job loss was measured with 20 items from Kinicki and Latack’s (1990) Coping With Job Loss Scale (CWJLS). Items are dichotomized in this measure as either “control” or “escape” coping. However, as explained in Latack et al. (1995), the labels of control coping and escape coping are synonymous with problem-focused coping and emotion-focused coping, respectively. In the present study, the CWJLS items were divided into an 11-item “problem-focused coping” scale, and a 9-item “emotion-focused coping” scale.

The CWJLS is a widely-used instrument (see Lai & Chan, 2002; Kinicki et al., 2000; McKee-Ryan et al., 2005) and the first standardized scale to measure coping specifically with the stressor of involuntary job loss. Although the CWJLS was the first scale to directly measure coping with involuntary job loss, its development was based on existing job stress coping measures (Kinicki & Latack, 1990). Furthermore, the measure's content validity was established with subject matter experts, and construct validity was established with factor analysis and by experimentally examining the process of coping with job loss over time (Kinicki & Latack, 1990).

The CWJLS is comprised of five factor-analytically derived subscales: proactive search, nonwork organization, positive self-assessment, distancing from loss, and job devaluation. The first three subscales (proactive search, nonwork organization, and positive self-assessment) encompass a problem-focused proactive strategy in which unemployed individuals take control of the situation. The last two subscales (distancing from loss and job devaluation) reflect an emotion-focused avoidance of actions or thoughts related to the job loss. A sample item from this scale is, "*Tell myself that there are more important things in life than having a job.*" Responses were obtained on a five-point Likert scale anchored from *hardly ever do this* (1) to *almost always do this* (5). In prior research, internal reliability of the proactive search subscale was .73, internal reliability of the nonwork organization subscale was .73, internal reliability of the positive self-assessment subscale was .67, internal reliability of the distancing from job loss subscale was .65, and internal reliability of the job devaluation subscale was .72 (Kinicki & Latack, 1990). In the present study, the internal consistency of the problem-focused coping scale was $\alpha = .89$, and the internal consistency of the emotion-focused coping scale was $\alpha = .75$.

Subjective well-being. Subjective well-being, defined as psychological well-being and adjustment to the demands of everyday life, was measured with the 12-item General Health

Questionnaire (GHQ-12) (Goldberg, 1978). This widely-validated instrument is a shortened version of the original GHQ, which contained 60 items. A sample item is, “Been able to enjoy your normal day to day activities?” Responses will be obtained on a four-point Likert scale anchored from *much more than usual* (1) to *much less than usual* (4). Adequate internal reliability of the GHQ-12 has been found with unemployed populations. For example, Rowley and Feather (1987) reported an internal reliability of .89 with their unemployed participants. The internal consistency of the subjective well-being scale in this study was $\alpha = .91$.

Life satisfaction. Life satisfaction was measured with the widely-used Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). A sample item from this five-item scale is, “*In most ways my life is close to ideal.*” Responses were obtained on a five-point Likert scale anchored from *strongly disagree* (1) to *strongly agree* (5). The internal reliability of the Satisfaction With Life Scale was .87, and this scale has been used previously in unemployment research (McKee-Ryan et al., 2005). In the present study, the internal consistency of the subjective well-being scale was $\alpha = .87$.

Demographics. The demographic variables of age, gender, race, marital status, number of dependents, date of job loss, and education were collected. For education, respondents were asked to indicate the highest level of education they have completed. Response choices were: (1) *Elementary school*; (2) *High school diploma/GED* (2); (3) *Some technical/vocational school, or some college*; (4) *college degree*; (5) *Some graduate school*; and (6) *Graduate degree*.

Secondary measures. Although the present study does not specifically include coping resources or reemployment status in its hypotheses, the present study included these measures because their inclusion is the norm in unemployment research (McKee-Ryan et al., 2005). Moreover, the addition of these variables allows for the potential exploration of other important

relationships not specifically addressed in the current study's hypotheses. The secondary measures of coping resources and reemployment status are explained in the following section.

Coping resources. Coping resources represent a collection of aids that a person can utilize to reduce the negative effects of a stressful situation. For the instance of job loss, researchers have generally identified three types of coping resources: personal (self-esteem), social (social support), and financial (financial resources) (Latack et al., 1995; McKee-Ryan et al., 2005).

Self-esteem. Self-esteem was measured with the widely-used ten-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). A sample item from this scale is, "*I feel that I have a number of good qualities.*" Responses were obtained on a four-point Likert scale anchored from *strongly agree* (4) to *strongly disagree* (1). Adequate internal reliability of Rosenberg's Self-Esteem Scale has been found with unemployed populations. For example, Prussia et al. (2001) reported an internal reliability of .79 with their unemployed participants. The internal consistency of the self-esteem scale in this study was $\alpha = .88$.

Social support. Social support was measured with the Social Support Scale developed by Caplan, Cobb, French, Van Harrison, and Pinneau (1975), using the modifications from Gowan et al. (1999). Two scales were used to operationalize the construct of social support: support from relatives and support from friends. Four items were used to measure each scale. A sample item for the variable support from relatives is, "*Since your job ended, how much can your closest relatives be relied on when things get tough?*" Correspondingly, a sample item for the variable support from friends is, "*Since your job ended, how much can your closest friends be relied on when things get tough?*" Responses were obtained on a five-point Likert scale anchored from *don't have any such person* (0) to *very much* (4). Responses were averaged to generate a global

measure of social support. Adequate internal reliability of the Social Support Scale has been found in a longitudinal study involving workers coping with an organizational merger (Fugate et al., 2002). Over four time points, Fugate et al. (2002) reported internal reliabilities of .86, .85, .63, and .93. The internal consistency of the social support scale in this study was $\alpha = .85$.

Financial resources. Financial resources were measured with a two-item scale assessing perceived economic hardship from Wanberg et al. (2002). The first item is, “*How difficult is it for you to live on your total household income (including your unemployment benefits and income from others persons) right now?*” Responses for this item were obtained on a three-point Likert scale anchored from *not at all difficult* (1) to *extremely difficult* (3). The second item is, “*How important is it for you, financially, to find a job within the next two months?*” Responses for this item were obtained on a three-point Likert scale anchored from *not at all important* (1) to *very important* (3). Internal reliability evidence was unavailable for this scale. The scale was reverse scored, such that a higher score represents less financial hardship. In the present study, the internal consistency of the financial resources scale was poor, $\alpha = .58$.

Reemployment status. Respondents will be asked three items to assess their job re-attainment, based on the Gowan et al. (1999) reemployment status measure. Respondents will indicate whether they are currently: (1) *Unemployed*, (2) *Employed, but in a job they did not want*, or (3) *Employed in a job they wanted*. It is necessary to consider satisfaction with a new job in addition to basic acquisition of a new job in measures of reemployment status (McKee-Ryan et al., 2009), as Wanberg et al. (2002) recognized this as an important component of their reemployment success model. Reemployment status will not be measured during the first survey (T1), but will be measured three months (T2) and six months (T3) following the initial survey (T1).

Phone interview. Each phone interview participant was asked seven questions. The mean interview duration was approximately 30 - 35 minutes. The questions were: “1. *How long ago did you lose your job? Describe the circumstances.*” “2. *How did you react immediately after you lost your job (in regards to coping and job search)?*” “3. *Has your behavior changed since you first lost your job? If so, how?*” “4. *What are you currently doing to find a new job?*” “5. *Has your job loss impacted your physical and/or mental health? If so, how?*” “6. *Has your job loss impacted your family/friends? If so, how?*” and “7. *How old are you? Do you feel that your age has affected your job search? If so, how?*”

RESULTS

Data Handling

Before testing the present study’s hypotheses, the data were screened according to the procedures specified by Tabachnick and Fidell (2007). First, variables were examined for missing data using Missing Values Analysis (MVA) in SPSS Version 19.0. Given that the data collection was executed via online surveys that required responses on all variables, the MVA did not reveal missing data.

Second, all variables were examined for outliers. *Z* scores were calculated for age, all three cognitive appraisal scales, both coping scales, self-esteem and social support scales, life satisfaction and well-being scales, and duration of unemployment. Any standardized *Z* scores greater than 3.29 ($p < .001$) were marked as a potential outlier (Tabachnick & Fidell, 2007). Across all study variables, two *Z* score values on the problem-focused coping scale exceeded the cutoff and were identified as possible outliers. Additional inspection revealed that the outlier *Z* scores for this scale exceeded the critical value only slightly, by .23 and .10. Additionally, the

pattern of values does not merit deletion. Thus, due to the small number of outliers identified and relatively large sample size, these outlier values should not substantively affect the results.

Third, normality of all variables was tested by examining histograms for skewness and kurtosis with super-imposed normal distributions. Inspection of histograms for all study variables indicated that the distributions were close to normal. In addition, Z statistics for skewness and kurtosis were created by subtracting each skewness or kurtosis value by zero and then dividing by the standard error of the statistic. Each variable was then tested for significant skewness and kurtosis using the alpha level of .001 ($Z = 3.29$). Based on this cutoff of .001, the variables of age, all three cognitive appraisal scales, and the problem-focused coping scale were identified as significantly skewed. The problem-focused coping scale was also identified as having significant kurtosis. These variables were examined more closely, and all responses were within an expected range. Also, the standard errors for skewness and kurtosis decrease with large sample sizes, a phenomenon which causes minor deviations in skewness and kurtosis to become statistically significant. However, several transformations (logarithmic and power transformation) were attempted on the variable age, due to its central role in study hypotheses. Because these transformations did not improve the normality of the age variable, untransformed age values were used in all analyses.

Descriptive Statistics and Correlations

Table 1 shows descriptive statistics for all study variables. Table 2 shows correlations among all study variables. Cognitive appraisal of job loss variables exhibited moderately to strongly positive correlations with coping variables (problem-focused and emotion focused) and outcome variables (well-being and life satisfaction). Contrary to study hypotheses, age was significantly correlated to only three study variables. Age exhibited modest but significant

relationships with intensity appraisal of job loss ($r = -.12, p < .05$), self-esteem ($r = .12, p < .05$), and amount of time unemployed ($r = .19, p < .001$).

Hypotheses Testing

Hypothesis 1. Three separate analyses were conducted to examine the relationships between age and each of the three types of cognitive appraisal.

Intensity appraisal. Using multiple linear regression, intensity appraisal of job loss was regressed on age, while controlling for education, number of years unemployed, and current financial resources.

First, intensity appraisal of job loss was regressed on the three control variables, education, number of years unemployed, and current financial resources. The model was significant, $R^2=.08, F(3, 304)=8.19, p<.001$. Together, the three control variables accounted for 7.5% of the variance in intensity appraisal of job loss.

To assess the main effect of age, the variable age was added to the analysis. Controlling for education, number of year unemployed, and current financial resources, age had a significant relationship with intensity appraisal in the hypothesized direction, $\Delta R^2=.014, F \text{ change} = 4.79, p=.03$. Thus, age explained an additional 1.4% of the variance in intensity appraisal of job loss beyond the control variables. For every one standard deviation increase in age, there was an associated .12 unit decrease in intensity appraisal. As hypothesized, unemployed workers tended to appraise the experience of job loss as more negatively intense as age increased.

Reversibility appraisal. Using multiple linear regression, reversibility appraisal of job loss was regressed on age, while controlling for education, number of years unemployed, and current financial resources.

First, reversibility appraisal of job loss was regressed on the three control variables, education, number of years unemployed, and current financial resources. The model was significant, $R^2=.08$, $F(3, 304)=8.55$, $p<.001$. Together, the three control variables accounted for 7.8% of the variance in reversibility appraisal.

To assess the main effect of age, age was added to the analysis. Controlling for education, number of years unemployed, and current financial resources, age had a significant relationship with reversibility appraisal in the hypothesized direction, $\Delta R^2=.09$, $F(1,303)=7.18$, $p<.001$, F change = 2.90, $p=.09$. Thus, age explained 8.7% of the variance in reversibility appraisal beyond the control variables. For every one standard deviation increase in age, there is an associated .096 unit decrease in reversibility appraisal. As hypothesized, unemployed workers tended to appraise unemployment as less reversible as age increased.

Causality appraisal. A sequential logistic regression was performed by comparing two models, in order to determine the relationship between age and causality appraisal of job loss. Logistic regression was used because causality appraisal was a dichotomous variable, measuring either internal or external causality appraisal.

The first logistic regression model included causality appraisal of job loss as the dependent variable and education, number of years unemployed, and current financial resources as predictors. This model was statistically significant, $\chi^2(3, N = 308) = 19.659$, $p < .001$, indicating that the predictors, as a set, distinguished between internal versus external causality appraisal of job loss.

The second logistic regression model added age to the set of predictors. Although the overall model with age added was statistically significant, the change in chi-square was not statistically significant, $\chi^2(1, N = 308) = .010$, $p > .05$, indicating that age did not significantly

add to the prediction of causality appraisal of job loss above the variables education, number of years unemployed, and current financial status. Contrary to the hypothesized result, age was not related to causality appraisal of job loss.

Hypothesis 2. To compare the correlations between age with emotion-focused coping strategies and age with problem-solving coping strategies, a Hotelling-Williams test was conducted. This test examines whether two dependent correlation coefficients that have been generated from the same sample are significantly different from each other. This test statistic is distributed as a *t*-value, and was calculated manually using an Excel spreadsheet. If the computed *t*-value is equal to or greater than the cutoff value in the *t*-table, then the difference in correlations is statistically significant at that level. Contrary to my hypothesis, there was not a significant difference ($t(305) = 1.236, p > .05$) between the correlation coefficient calculated for emotion-focused coping and age ($r = .010$) versus the correlation coefficient calculated for problem-focused coping and age ($r = .089$). Age was not significantly related to coping with either job loss strategy use.

Hypothesis 3. The analyses for Hypothesis 3 were dependent on the presence of a significant relationship between age and coping. Because this hypothesized relationship between age and coping was not observed in Hypothesis 2, Hypothesis 3 was not tested.

DISCUSSION

The purpose of this study was to examine the cognitive appraisal and coping strategies utilized by unemployed workers across the life-span. As hypothesized, unemployed workers tend to appraise the experience of job loss as more negatively intense and less reversible as age increases. Contrary to the hypothesized results, age was not related to causality appraisal of job loss, and age was not significantly related to coping strategy use.

The results of this study provide support and further clarity for past empirical findings examining cognitive appraisal of job loss, a sparsely studied construct in job loss research (Gowan et al., 1999; McKee-Ryan et al., 2005). In this study, cognitive appraisal of job loss was measured in three parts: a) intensity, b) causality, and c) reversibility. This measurement approach is consistent with the McKee-Ryan et al. meta-analysis, which shows that a relatively small number of past job loss studies have included one or two of these cognitive appraisal components. Although these three components of cognitive appraisal of job loss have been separately examined in previous research, the present study is the first to measure all three components in a single study. The present study's results are consistent with Leana and Feldman's (1992) finding that older workers appraised their job loss experience as less reversible than their younger counterparts did. However, the results of this study expanded upon this finding, also demonstrating that older unemployed workers appraised their job loss situations as more intense in terms of discomfort, disruption, and threat.

The qualitative data obtained from twenty semi-structured interviews further corroborated these findings regarding reversibility and intensity appraisals. Almost all interviewed unemployed workers who were over age 50 believed that their age did affect their job loss experience.

A 56-year-old business analyst with an MBA degree and 34 years of work experience described her dilemma after being laid off:

Age has affected my job search 100%. Interviewers ask surreptitiously if you can do the work or work a certain shift because of your age. People assume I'm nearing retirement, when I'm going to work until I drop. They also assume older people don't have computer skills, but you can't exist in business without them. AARP has all kinds of advice to find a job, but it's not working.

A 54-year-old involuntarily unemployed investigative reporter described similar frustrations with finding reemployment:

It's become apparent to me that I'm being discriminated against because of my age. The longer I go unemployed, I'm finding out that I'm being passed over for candidates younger than me. I don't feel old or nowhere near washed up. I have at least 15 more years left in me. The recession has been so prolonged, and employers are shipping jobs overseas. I think it is borderline criminal. There are so many people in my age bracket who have been cut loose. A whole Baby Boomer generation is adrift right now. Interviews that I've had have always gone to younger candidates. The evaluation of candidates is ultra-selective and based on personal preference (someone they know, or preference of gender or age). So many people are desperate for work; it's like winning the lottery when you do find a job. My family and the families of millions of Americans are suffering. No social mobility, difficult to put food on the table, savings have been exhausted. If it wasn't for the help of kind relatives, we would be on the street and would have lost our house a long time ago.

The quantitative and qualitative results pertaining to intensity and reversibility appraisal of job loss possess both theoretical and practical importance for aging workers. As cognitive appraisal is an integral component of the stress-response process (Lazarus & Folkman, 1984), the present study's findings contribute to our understanding of age as an important individual difference in this process (Aldwin, 2007). From an applied standpoint, downsizing organizations should take older workers' more negative appraisal of involuntary job loss into consideration. Although layoffs are a hard reality and are not realistically preventable, past studies have found that negative appraisal of job loss is related to decreased physical and psychological well-being (McKee-Ryan et al., 2005). Thus, the humanistic values and ethics guiding industrial organizational psychology should be utilized for employee advocacy (Lefkowitz, 2008),

potentially minimizing the devastating impact of involuntary job loss on the more vulnerable older population. Targeted resources could be developed for organizations, job loss support groups, and employment offices to aid older workers who have experienced layoffs.

A 57-year-old financially scraping by with temporary work described the need for resources specialized for older unemployed workers:

In most of the job loss support groups I go to, everyone is over 50 and they feel that most companies want people who are younger, quicker, more flexible. I hear it from most people my age in the support groups. I haven't even gotten a job interview in a long time.

Moreover, organizational policies could be altered to provide more forewarning prior to termination, increasing the time period between notification and the last day of employment. As job search behavior is positively related to finding reemployment (Kanfer, Wanberg, & Kantrowitz, 2001), this additional time would enable older workers (and workers of all ages) to have less traumatic, drastic transitions out of their current jobs and into the job search process.

A 51-year-old laid off worker described her immediate reaction after being terminated, and her transition into job searching:

I was very shocked, not expecting it. I had a great reputation, but there was a re-org. I had a pity party, went home, didn't eat for 36 hours, sat on the couch. I'm usually a "glass is half full" person by nature. It has been a rollercoaster, but I got it out of my system and then got to work. I reached out to everybody I know. Networking, emailing, phone calls, updated my resume. Set up lunch and coffee dates with lots of people.

Contrary to the study hypothesis, age was not significantly related to internal versus external causality attribution of the involuntary job loss event. There are several possible explanations for this result. First, the quality of the causality appraisal measure is questionable, as this is a single-item measure. Additionally, past research has found little internal attribution

from laid-off employees regardless of age, as most attributed the causation to external factors such as an economic recession or organizational downsizing (Leana & Feldman, 1992). Given the enormous spike in unemployment following the 2008 economic downturn, the external force of the suffering economy may have overwhelmed the present study's examination of causality appraisal.

A 50-year-old unemployed manager described how the recession affected her unemployment experience:

I have 3 kids, 2 cats, and a dog, and was going to be evicted from my house in one week. One faith-based job loss support group gave us \$3,000 so we wouldn't get evicted from our house. It's amazing how many people I've talked to who have completely given up on their job search or had their home foreclosed on. It's a really rough time right now for everyone.

Contrary to the hypothesized results, age was not related to causality appraisal of job loss, and age was not significantly related to coping strategy use. Why were the results contrary to the hypothesized relationships linking age, coping, and well-being/life satisfaction outcomes? These hypotheses were formulated from an integration of job loss literature and life-span coping literature. However, because virtually none of the life-span coping theories test coping with the stressor of job loss, it is possible that the present study's link between life-span coping theories and job loss was unwarranted. Perhaps the life-span coping theories should not be extended to the domain of coping with job loss, as these theories may not pertain to such a specific stressor. The present study's sample is another possible reason for the unsupported hypotheses. Since all participants were recruited online through job loss support groups, it is possible that the workers included in this sample utilized job loss coping strategies differently than the general

unemployed population. It seems reasonable to presume that an unemployed individual who proactively seeks such resources is not representative of all unemployed individuals.

Lastly, it is possible that age was not measured appropriately in this study. The topic of who is considered an “older worker” and the way in which the variable of age should be treated in analyses has been a long-standing debate in the literature (Ng & Feldman, 2008). According to Cleveland and Shore (1992), age in the workplace can be defined in a number of different ways, including an employee’s chronological age, an employee’s subjective age (employee’s self-perception of age), an employee’s social age (others’ perception of employee’s age), and the employee’s relative age (employee’s age relative to others in the work group). Perhaps the present study’s use of chronological age failed to adequately capture age as the focal construct.

Limitations

This study possessed several limitations. First, as mentioned previously, it is possible that the sample was not representative. Participants were recruited through online groups for unemployed individuals, which introduced several potential sources of bias. All participants in this study had access to a computer and the Internet, which may exclude workers who do not have access to these resources or do not know how to use these resources. Although technology proficiency has become increasingly expected in most professions (Baruch, 2006), it is incorrect to assume that individuals who have computer and Internet proficiency represent workers of all ages and professions.

Furthermore, because participants were recruited online through job loss support resources, it is likely that this study’s sample may have differed from the population of unemployed workers in important and meaningful ways. This study’s participants were actively seeking unemployment resources, networking, and social support, so they may have differed

from the population in regards to their coping strategies, mental and physical health, or other relevant individual differences such as conscientiousness. The hypothesized age effects may not have been observed due to the especially resilient, pragmatic nature of this study's sample, as all participants had the initiative to access and utilize online unemployment resources. Despite these noteworthy limitations of the sample, the present study utilized a unique recruitment strategy, as past job loss studies have ordinarily recruited through state workforce centers (e.g., Wanberg et al., 2002). Moreover, the recruitment technique utilized in the present study resulted in a nationally representative sample. Acknowledging the limitations of this study's sample, future research should replicate the present study with a random sample not drawn from pre-existing support groups.

Lastly, common method bias is another limitation of this study (Podsakoff et al., 2003), as all quantitative data were obtained through self-report Likert-type surveys from the same source. Common method bias is problematic because using the same method to measure various constructs can either inflate or deflate the observed relationships between the measured constructs. This distortion can be due to a number of factors other than the relationships between the constructs themselves, such as proximity of items in a survey, the medium, location, or timing in which measures are collected, or participants' response tendencies. Although common method bias was a concern in the present study, qualitative interview data were also collected to ameliorate this issue and supplement the quantitative findings. In addition, the first 250 participants who indicated that they would be willing to participate in two abbreviated follow-up surveys will be emailed survey links three and six months following the initial survey. After completion of the first follow-up survey, participants will be mailed \$20 within one month. Data obtained from these follow-up surveys were beyond the scope of this thesis study. These two

brief follow-up surveys will further strengthen the present study by providing more objective, longitudinal criterion measures, reducing problems associated with a cross-sectional design.

Future Directions

Many opportunities exist for future research in this area. Although existing theory adequately explains coping with job loss in general (Latack et al., 1995), future job loss studies should devote attention to the unique contribution of age. The age differences in cognitive appraisal of job loss observed in the present study suggest that coping with job loss is not consistent across the life-span. Currently, our theories of coping with job loss fail to address this phenomenon. Although the present study attempted to review and integrate pertinent coping literature from a developmental perspective, the theoretical conceptualization of cognitive appraisal and coping with job loss across the life-span is a fruitful area of research. A more interdisciplinary, non-traditional approach that incorporates developmental theories with our widely-used job loss theories could deepen our understanding of coping with job loss. For example, the socioemotional selectivity theory (Cartensen, 1993), the dual-process model of assimilative and accommodative coping (Brandtstädter & Renner, 1990), the model of selection, optimization, and compensation (Baltes & Baltes, 1990), and the life-span theory of control (Heckhausen & Schulz, 1995) could be used to study the unemployment experience.

Additionally, job loss research must expand the conceptualization of unemployment to account for underemployment and bridge employment. Underemployment occurs when a worker is employed, but in a job considered below his or her full working capability (McKee-Ryan et al., 2009). A 47-year-old looking for work described her struggle with underemployment:

Like a lot of people in my generation, I've worked since I was 14. All through high school and college. I still have 25 more years to offer. But nobody wants to hire

someone like me at a restaurant or bookstore because they know we will leave as soon as we get something better. For people who say "swallow your pride" and get a job below your education and work experience, it doesn't make business sense to do it because we'll leave as soon as we find something better. Companies don't want to waste the time and training dollars. It's a frustrating situation and underemployment isn't about "swallowing your pride." I purposely only go back on my resume 15 years, so you won't know how old I am from looking at my resume.

Similarly, future job loss research must consider the changing nature of retirement by incorporating bridge employment literature. Retirement research is on the rise due to changing demographic and labor force trends, such as the aging Baby Boomer generation, increasing life expectancies, dwindling Social Security benefits, and lower birth rates (Alley & Crimmins, 2007). Bridge employment, a growing phenomenon, is defined as a longitudinal workforce participation process, which takes place following a person's retirement from full-time work but before the person's complete withdrawal from the workforce (Wang & Shultz, 2010). This intermediary stage is becoming increasingly common in the retirement process, and may be motivated by a desire to gradually adjust to retirement life, financial necessity, or health reasons (Wang & Shultz, 2010). Integrating bridge employment literature into job loss studies will contribute to understanding the complexities experienced by the growing older segment of the workforce. For example, future studies examining cognitive appraisal and coping related to job loss in an older sample should measure bridge employment. Older workers in bridge employment would presumably have drastically different job loss experiences than older workers in other phases of their careers.

Finally, more longitudinal research is needed in the area of job loss. The process of coping with job loss is dynamic, and fluctuates over time based on factors internal and external

to the unemployed individual (Wanberg et al., 2002). These changes are impossible to capture with cross-sectional study designs. Studies measuring over multiple time points spanning months or years would enable researchers to more effectively examine the job loss experience, reemployment success, health outcomes, and the contribution of external forces like the economic climate and labor market (Wanberg et al., 2002).

Conclusion

In conclusion, this study demonstrated that cognitive appraisal of involuntary job loss was perceived as more intense and less reversible as age increased. Contrary to expectations, age was not related to use of coping strategies and the outcomes of well-being and life satisfaction. As the author is unaware of any existing studies examining coping with job loss in an aging context, more research is warranted to further clarify the relationships between cognitive appraisal, coping, stress outcomes, and age following involuntary job loss. However, results of the present study suggest that organizations and mental health professionals must take age into consideration during layoffs.

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Appendix

Table 1

Descriptive Statistics for Study Variables

Variable	N	Mean	Standard Deviation	Variance	Skewness	SE	Kurtosis	SE
1. Age	308	51.90	9.03	81.54	-0.58	0.14	0.30	0.28
2. Intensity appraisal	308	2.42	1.08	1.17	0.65	0.14	-0.24	0.28
3. Reversibility appraisal	308	3.34	1.17	1.38	-0.46	0.14	-0.85	0.28
4. Causality appraisal	308	2.96	0.89	0.80	-0.97	0.14	0.44	0.28
5. Problem-focused coping	308	4.03	0.68	0.47	-0.93	0.14	0.93	0.28
6. Emotion-focused coping	308	2.72	0.72	0.52	0.21	0.14	-0.70	0.28
7. Well-being	308	2.46	0.64	0.41	-0.03	0.14	-0.77	0.28
8. Life satisfaction	308	2.46	0.93	0.87	0.33	0.14	-0.66	0.28
9. Self-esteem	308	3.51	0.57	0.32	-0.26	0.14	-0.33	0.28
10. Social support	308	3.64	0.83	0.69	-0.29	0.14	-0.56	0.28
11. Financial resources	308	1.49	0.51	0.26	0.80	0.14	10.83	0.28
12. Years unemployed	308	1.58	1.65	2.71	2.84	0.14	10.84	0.28

Table 2

Correlations Among Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	1.00	-.120*	-0.11	-0.09	0.09	0.01	0.06	0.03	.120*	0.01	0.10	.192**
2. Intensity appraisal	-.120*	1.00	.258**	0.01	0.00	.137*	.443**	.345**	.216**	0.09	.224**	.162**
3. Reversibility appraisal	-0.11	.258**	1.00	0.08	.283**	.330**	.486**	.415**	.395**	.415**	.212**	.197**
4. Causality appraisal	-0.09	0.01	0.08	1.00	.239**	.122*	.119*	0.10	.192**	0.09	-0.03	-.137*
5. Problem-focused coping	0.09	0.00	.283**	.239**	1.00	.388**	.157**	.206**	.395**	.202**	-0.09	-0.06
6. Emotion-focused coping	0.01	.137*	.330**	.122*	.388**	1.00	.288**	.318**	.332**	.362**	.225**	-0.06
7. Well-being	0.06	.443**	.486**	.119*	.157**	.288**	1.00	.594**	.687**	.301**	.423**	.201**
8. Life satisfaction	0.03	.345**	.415**	0.10	.206**	.318**	.594**	1.00	.546**	.349**	.377**	.213**
9. Self-esteem	.120*	.216**	.395**	.192**	.395**	.332**	.687**	.546**	1.00	.283**	.187**	.162**
10. Social support	0.01	0.09	.415**	0.09	.202**	.362**	.301**	.349**	.283**	1.00	.149**	-.120*
11. Financial resources	0.10	.224**	.212**	-0.03	-0.09	.225**	.423**	.377**	.187**	.149**	1.00	-0.07
12. Years unemployed	.192**	.162**	.197**	-.137*	-0.06	-0.06	.201**	.213**	.162**	-.120*	-0.07	1.00

N = 308

* $p < .05$, ** $p < .01$

Table 3

Measures

Cognitive appraisal of job loss: Intensity appraisal (Fugate, Kinicki, & Scheck, 2002)		
Item 1	“Overall, the changes in my personal and work life caused by the loss of my job are threatening.”	Five-point Likert scale anchored from strongly disagree (1) to strongly agree (5)
Item 2	“Overall, the changes in my personal and work life caused by the loss of my job are harmful.”	Five-point Likert scale anchored from strongly disagree (1) to strongly agree (5)
Cognitive appraisal of job loss: Causality appraisal (Winefield, Tiggemann, & Smith, 1987)		
Item 1	“What is the main reason you do not have a job now?”	The four response options include lack of abilities or skills (1), you didn’t try hard enough (2), the situation you’re in (3), and bad luck (4).
Cognitive appraisal of job loss: Reversibility appraisal (Feather & O’Brien, 1987)		
Item 1	“How confident are you about finding the job you really want in the near future?”	Five-point Likert scale anchored from not at all confident (1) to very confident (5).
Item 2	“How confident are you about finding any kind of job at all in the near future?”	Five-point Likert scale anchored from not at all confident (1) to very confident (5).

Coping With Job Loss (Kinick and Latack, 1990)		
Item 1	Focus my time and energy on job search activities.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 2	Devote a lot of time to looking for a new job.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 3	Get together with job contacts, people who can help me find another job.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 4	Talk with people who can help me find a job.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 5	Give it my best effort to find a new job.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 6	Remind myself that other people have been in this situation and that I can probably do as well as they did.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 7	Try not to think about what happened.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 8	Tell myself that time usually takes care of situations like this.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 9	Remind myself that it isn't the end of the world.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 10	Tell myself that there are more important things in life than having a job.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)

Item 11	Remind myself that a job isn't everything.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 12	Call on my family and friends.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 13	Try to get additional people involved in the situation.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 14	I avoid looking for a job.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 15	Work on ways to save money.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 16	Watch the budget and conserve money.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 17	Keeping busy, keeping very active.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 18	Think about my skills and all the qualifications I have to offer.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 19	Think of ways to use the situation to show what I can do.	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)
Item 20	Do my best to get out of this situation gracefully	Five-point Likert scale anchored from hardly ever do this (1) to almost always do this (5)

General Health Questionnaire (Goldberg, 1978)		
Item 1	Lost much sleep over worry?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 2	Felt constantly under strain?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 3	Been able to concentrate on what you are doing?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 4	Felt that you are playing a useful part in things?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 5	Been able to face up to your problems?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 6	Felt capable of making decisions about things?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 7	Felt you could not overcome your difficulties?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 8	Been feeling reasonably happy, all things considered?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 9	Been able to enjoy your normal day to day activities?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)

Item 10	Been feeling unhappy or depressed?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 11	Been losing confidence in yourself?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)
Item 12	Been thinking of yourself as a worthless person?	Four-point Likert scale anchored from much more than usual (1) to much less than usual (4)

Life Satisfaction Scale (Diener, Emmons, Larsen, & Griffin, 1985)		
Item 1	In most ways my life is close to my ideal.	Five-point Likert scale anchored from strongly disagree (1) to strongly agree (5)
Item 2	The conditions of my life are excellent.	Five-point Likert scale anchored from strongly disagree (1) to strongly agree (5)
Item 3	I am satisfied with my life.	Five-point Likert scale anchored from strongly disagree (1) to strongly agree (5)
Item 4	So far I have gotten the important things I want in life.	Five-point Likert scale anchored from strongly disagree (1) to strongly agree (5)
Item 5	If I could live my life over, I would change almost nothing.	Five-point Likert scale anchored from strongly disagree (1) to strongly agree (5)

Rosenberg Self-Esteem Scale (Rosenberg, 1965)		
Item 1	On the whole, I am satisfied with myself.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)
Item 2	At times, I think I am no good at all.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)
Item 3	I feel that I have a number of good qualities.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)
Item 4	I am able to do things as well as most other people.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)
Item 5	I feel I do not have much to be proud of.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)
Item 6	I certainly feel useless at times.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)
Item 7	I feel that I'm a person of worth, at least on an equal plane with others.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)
Item 8	I wish I could have more respect for myself.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)
Item 9	All in all, I am inclined to feel that I am a failure.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)
Item 10	I take a positive attitude toward myself.	Four-point Likert scale anchored from strongly agree (4) to strongly disagree (1)

Social Support Scale (Caplan, Cobb, French, Van Harrison, & Pinneau, 1975)		
Item 1	Since your job ended, how much do your closest relatives go out of their way to do things to make your life easier for you?	Five-point Likert scale anchored from don't have any such person (0) to very much (4)
Item 2	Since your job ended, how easy is it to talk with your closest relatives?	Five-point Likert scale anchored from don't have any such person (0) to very much (4)
Item 3	Since your job ended, how much can your closest relatives be relied on when things get tough?	Five-point Likert scale anchored from don't have any such person (0) to very much (4)
Item 4	Since your job ended, how much have your closest relatives been willing to listen to your personal problems?	Five-point Likert scale anchored from don't have any such person (0) to very much (4)
Item 5	Since your job ended, how much do your closest friends go out of their way to do things to make your life easier for you?	Five-point Likert scale anchored from don't have any such person (0) to very much (4)
Item 6	Since your job ended, how easy is it to talk with your closest friends?	Five-point Likert scale anchored from don't have any such person (0) to very much (4)
Item 7	Since your job ended, how much can your closest friends be relied on when things get tough?	Five-point Likert scale anchored from don't have any such person (0) to very much (4)
Item 8	Since your job ended, how much have your closest friends been willing to listen to your personal problems?	Five-point Likert scale anchored from don't have any such person (0) to very much (4)

Financial Resources (Wanberg, Hough, & Song, 2002)		
Item 1	“How difficult is it for you to live on your total household income (including your unemployment benefits and income from others persons) right now?”	Three-point Likert scale anchored from not at all difficult (1) to extremely difficult (3)
Item 2	“How important is it for you, financially, to find a job within the next two months?”	Three-point Likert scale anchored from not at all important (1) to very important (3)

Reemployment Status (Gowan, Riordan, & Gatewood, 1999)		
Item 1	“What is your current employment status?”	Unemployed (1), Employed, but in a job they did not want (2), or Employed in a job they wanted (3)

Demographics		
Item 1	Date of birth	N/A
Item 2	Gender	Male (1), Female (2)
Item 3	Race	White (1), Hispanic (2), African American (3), Native American (4), Asian American (5), Other (6)
Item 4	Current marital status	Single (1), Married (2), Divorced (3), Separated (4), Widowed (5)
Item 5	Number of dependents	N/A
Item 6	Date of job loss	N/A
Item 7	Education	Elementary school (1), High school diploma/GED (2), Some technical/vocational school, or some college (3), college degree (4), Some graduate school (5), and Graduate degree (6)