

ABSTRACT

Title of Dissertation: COPING WITH THE PSYCHOLOGICAL
CHALLENGES OF UNEMPLOYMENT:
TESTING A SOCIAL COGNITIVE MODEL

Ruogu Jason Wang
Doctor of Philosophy, 2022

Dissertation directed by: Dr. Robert W. Lent
Counseling, Higher Education, and Special
Education

Increasingly, involuntary job loss is being seen as a normative career process, though one with significant effects on mental health and well-being. Coping with unemployment has most often been looked at through the lens of job search coping and re-employment outcomes, with fewer studies focused on coping with the psychological challenges of unemployment. This study adapts the social cognitive model of career self-management (Lent & Brown, 2013) to examine social cognitive predictors of well-being and psychological distress during unemployment. The psychometric properties of a revised coping behaviors measure and a new coping self-efficacy measure were examined with an initial sample of 196 unemployed respondents, yielding a 2-factor coping behaviors scale and a 1-factor psychological coping self-efficacy scale. The factor structures of these measures were confirmed in a second sample of unemployed respondents ($n = 406$) and, along with measures of proactive personality, financial strain, and social support, used to test the social cognitive coping model. The model offered good fit to the data and accounted for a substantial amount of the variance in well-being and psychological distress. Support was also found for most of the hypothesized paths. The study's implications for practice and future research on coping with unemployment are discussed.

COPING WITH THE PSYCHOLOGICAL CHALLENGES OF UNEMPLOYMENT:
TESTING A SOCIAL COGNITIVE MODEL

by

Ruogu Jason Wang

Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2022

Advisory Committee:
Professor Robert W. Lent, Chair
Professor Clara E. Hill
Professor Dennis M. Kivlighan
Professor Cixin Wang
Professor Jennifer L. Wessel

© Copyright by
Ruogu Jason Wang
2022

Acknowledgements

First and foremost, I thank my advisor, Bob Lent, for working with me throughout this intensive process. In working on this dissertation, we spent a lot of time thinking, exploring, conceptualizing, designing, implementing, and analyzing. Not only was Bob involved every step of the way, but I would even say we had fun with it. Bob: thank you, thank you, thank you. I also thank my committee members, Clara Hill, Dennis Kivlighan, Cixin Wang, and Jennifer Wessel, who were sources of encouragement throughout the process, and who made my dissertation better with their feedback. Next, I thank my fellow Lentil lab mates, Bhanu Moturu and Emily Cygrymus. They were crucial in helping shape my dissertation during the conceptual stages, and in providing feedback during subsequent key points. I also thank my cohort mates, Thomas Le, Judy Gerstenblith, Greta Jankauskaite, and Justin Hillman. From the beginning of this program, we have supported and celebrated each other as only people who truly understand the experience first-hand are able to do. Finally, I thank my family, my friends, and my partner, Eli Kohlenberg. Their love and support kept me afloat when I was most stressed, and they provided me respite from dissertation work when I needed it most.

Table of Contents

Acknowledgements.....	ii
Table of Contents.....	iii
List of Tables	v
List of Figures	vi
Introduction.....	1
The Effects of Unemployment and Re-Employment on Well-Being.....	3
Unemployment and Coping	4
Measures of Coping Strategies	5
Coping Strategies and Well-Being Outcomes	8
Coping Strategies and Re-Employment Outcomes.....	8
Personal and Social Coping Resources.....	9
Theoretical Models of Job Loss and Unemployment Coping	10
Career Self-Management Model of Social Cognitive Career Theory	11
Research Questions and Hypotheses	13
Method.....	15
Design	15
Participants.....	15
Measures	18
Coping with Unemployment Scales (CUES; Lent et al., 2022)	19
Self-Efficacy for Psychological Coping with Unemployment Scale (PCUE-SE)	
.....	22
Job Search Self-Efficacy Behavior (JSSE-B; Saks et al., 2015).....	23
Proactive Personality Scale – Shortened Version (PPS; Seibert et al., 1999)	24
Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, et al., 1988)	25
Perceived Social Support for Job Search Activity Scale (PSSJSAS; Rife & Belcher, 1993).....	26
Financial Strain Scale (FSS; Ullah, 1990)	27
Depression, Anxiety, and Stress Scale Short Form (DASS-21; Lovibond & Lovibond, 1995).....	28
World Health Organization 5-Item Well-Being Index (WHO-5; World Health Organization, 1998)	29
Procedures.....	30
Results.....	32
Exploratory Factor Analysis	32
Coping with Unemployment Scales.....	32
Coping with Unemployment Self-Efficacy Scale.....	35
Reliability and Validity Estimation	35
Confirmatory Factor Analysis.....	37
Measurement Model Test	38
Structural Model Analyses.....	38
Discussion.....	42
Summary of Major Findings.....	42

Implications for the Utility of the New Measures	44
Implications for Understanding and Facilitating Psychological Coping with Unemployment.....	46
Limitations and Directions for Future Research	50
Extended Literature Review	54
Defining Displacement, Job Loss, and Unemployment.....	55
The Effects of Unemployment and Re-Employment on Well-Being.....	57
Mediating Factors	57
Moderating Factors	59
Unemployment and Coping	61
Coping Strategies and Well-Being Outcomes	63
Coping Strategies and Re-Employment Outcomes.....	63
Personal and Social Coping Resources	64
Theoretical Models of Job Loss and Unemployment Coping	67
Career Self-Management Model of Social Cognitive Career Theory	69
Tables	74
Appendices.....	96
Bibliography	116

List of Tables

Table 1. Demographics Information for Measure Development and Hypothesis Testing Samples	75
Table 2. Coping with Unemployment Scale (CUES) Items and Factor Loadings for Initial, 3-Factor Solution for the Measure Development Sample (n = 196)	77
Table 3. Hierarchical Regression Analysis for Variables Predicting Well-Being in the Measure Development Sample (n = 196)	80
Table 4. Hierarchical Regression Analysis for Variables Predicting Psychological Distress in the Measure Development Sample (n = 196)	81
Table 5. Coping with Unemployment Scale (CUES) Final Items and Factor Loadings for the Measure Development Sample (n = 196)	82
Table 6. Self-Efficacy for Psychological Coping with Unemployment (PCUE-SE) Scale Items and Factor Loadings for the Measure Development Sample (n = 196)	85
Table 7. Descriptive Statistics for All Variables in Measurement Development Sample (n = 196)	87
Table 8. Observed Variable Correlations Between SCCT and Validity Estimate Variables for Measure Development Sample (N=196)	88
Table 9. CUES Confirmatory Factor Analysis Standardized Loadings for Latent Variables (N=406)	89
Table 10. PCUE-SE Confirmatory Factor Analysis Standardized Loadings for Latent Variables (N=406)	91
Table 11. 7-Factor Model with Parcels Confirmatory Factor Analysis Standardized Loadings for Latent Variables (N=406)	92
Table 12. Latent Variable Correlations in 7-Factor Measurement Model Test	94
Table 13. Observed Variable Correlations in the Hypothesis Testing Sample (n = 406)	95
Table 14. Descriptive Statistics for SCCT Variables in Hypothesis Testing Sample (n = 406)	96

List of Figures

Figure 1. The Career Self-Management Model	12
Figure 2. A Career Self-Management Model of Coping with Unemployment	15
Figure 3. Structural Coefficients in the Career Self-Management Model of Coping with Unemployment	42

Introduction

The ability to cope with unemployment is important considering that only 55% of displaced workers are re-employed full-time a year after job loss; moreover, this re-employment percentage can substantially drop during economic downturns, such as during the Great Recession when it fell to only 40% (Quintini & Venn, 2013). Simply put, it is imperative that we understand how involuntary unemployment affects workers' lives and how coping strategies, which have been shown to ameliorate the effects of unemployment on their health, can be implemented to achieve better outcomes (McKee-Ryan et al., 2005).

Research on job loss has evolved over the decades. In particular, studies have looked at the effects of the Great Recession and start of the COVID-19 pandemic on unemployment, two events that significantly spiked the unemployment rate in the U.S. to highs of near 10% and 15% respectively, compared with the recent 50-year average of 6.2% (U.S. Bureau of Labor Statistics, 2022). These recent record numbers and other long-term trends in employment (e.g. declining job security) may be reshaping how unemployment is viewed; namely, it may be shifting from being seen as a rare event to being considered a more commonplace, perhaps even inevitable, event over the course of one's career (Pignault & Houssemand, 2017). Thus, reflecting job market realities, studies are increasingly looking at involuntary job loss as a normative career process, akin to other career setbacks and transitions, calling for individuals to engage in self-management and adaptability (e.g. Thompson et al., 2017).

At the same time, the measurement of unemployment coping has not appeared to keep up with changing times. Many studies on job loss coping strategies focus narrowly on the search for re-employment and are concerned with re-employment outcomes. The drawbacks of this narrow operationalization of unemployment coping become clear during major economic downturns, such as at the start of the COVID pandemic in the U.S., when job vacancies fell by over 40% in the spring of 2020, and finding new employment became particularly difficult (Forsythe et al, 2020). Thus, it is important to consider coping with unemployment in broader terms that specifically include coping with the psychological challenges of job loss.

In the literature that does examine unemployment coping more comprehensively, the two most commonly used coping scales were created over 30 years ago, appear to contain significant content domain gaps, and have been used primarily to study re-employment outcomes. The current study builds upon the existing research in at least four ways: (a) by using and attempting to refine a new, more comprehensive measure of unemployment coping (developed in a prior study), (b) by developing a companion measure of coping self-efficacy, (c) by framing the research questions in the context of an integrative theoretical framework, the Career Self-Management (CSM; Lent & Brown, 2013) model of Social Cognitive Career Theory (SCCT; Lent et al., 1994), and (d) by focusing on the psychological challenges of coping with involuntary job loss – that is, in situations where workers have been fired for a variety of reasons (e.g., organizational downsizing, unsatisfactory performance) rather than instances in which workers have chosen voluntarily to leave their jobs (Gowan, 2014; Latack et al., 1995).

The Effects of Unemployment and Re-Employment on Well-Being

Part of psychology's interest in unemployment is due to its impact on people's well-being. McKee-Ryan et al. (2005) conducted a meta-analysis, finding that those who are unemployed had significantly decreased psychological as well as physical well-being when compared to those who are employed. Note that in the following descriptions of effect sizes, Cohen's d s of 0.2, 0.5, and 0.8 are considered, respectively, small, medium, and large effects. In the cross-sectional studies reviewed, compared to those who were employed, those who were unemployed had lower levels of mental health ($d = -0.57$), lesser satisfaction with life ($d = -0.48$), more self-reported physical health problems ($d = -0.45$), and lower marital/family satisfaction ($d = -0.21$). In the longitudinal studies reviewed that looked at what happens when unemployed persons become re-employed, there were large improvements in psychological health ($d = -0.89$) and satisfaction with life ($d = -3.04$), and more modest improvements in self-reported physical health ($d = -0.36$). The improvements in satisfaction with life and physical health should, however, be interpreted cautiously because they are based on a relatively small number of studies and total sample size. In the longitudinal studies reviewed that examined what happens when employed persons become unemployed, there was a small, negative effect of unemployment on mental health ($d = -0.38$).

In another meta-analysis, Paul and Moser (2009) focused on the effect of unemployment on mental health. Their findings replicate the findings of McKee-Ryan et al.'s (2005) meta-analysis, finding that those who are unemployed show more mental health distress (indicated by levels of depression, anxiety, psychosomatic

issues, mixed symptoms of distress, self-esteem, and well-being) than those who are employed, with an aggregate medium-sized effect size of $d = 0.51$. When looking specifically at 86 longitudinal studies, with a mean interval of 16 months (range of 3 days to 7.5 years) between T1 and T2, Paul and Moser's (2009) meta-analysis found a small-sized effect of worsening mental health distress for participants who lost their job between T1 to T2 ($d = 0.19$). For participants who found new jobs between T1 and T2, a small-sized effect in the opposite direction was found, where mental health distress was significantly reduced ($d = -0.35$). These results replicate an earlier meta-analysis of longitudinal studies by Murphy and Athanasou (1999), which also found that loss of employment had a significant, small-sized negative effect on mental health ($d = 0.36$) and that re-gaining employment had a significant, medium-sized positive effect on mental health ($d = 0.54$). In sum, available research provides evidence that unemployment is associated with a decrement in well-being and that subsequent re-employment predicts improved well-being.

Unemployment and Coping

Given the association of unemployment with adverse outcomes, it is important to consider how people cope with being unemployed. Coping, defined in general terms, refers to the efforts, both cognitive and behavioral, that one puts towards managing and minimizing one's stress. Looking specifically at involuntary job loss coping strategies, the literature frequently categorizes these into two types, problem-focused strategies and emotion-focused strategies (Hanisch, 1999; Solove et al., 2015), though other categorization attempts have been made, such as productive versus non-productive coping strategies (Langens & Mose, 2006).

Problem-focused coping (also referred to as control-oriented coping) is action directed at addressing the root of the issue (i.e., unemployment); examples include looking for new employment, re-training and updating one's career-related skills, or moving to another city with better employment opportunities (Leana et al., 1998; McKee-Ryan & Kinicki, 2002). Emotion-focused coping (also referred to as escape-oriented coping or symptom-focused coping) is focused on mitigating the emotional distress caused by unemployment; examples include minimizing how serious the job loss is, avoiding thoughts about the stress of unemployment, and expressing frustration about the situation (Leana et al. 1998; McKee-Ryan & Kinicki, 2002). A third category, symptom management coping, has also been proposed (Leana & Feldman, 1990), but later reviews have merged this category with emotion-focused coping (e.g., Hanisch, 1999). The association of problem-focused coping strategies with re-employment outcomes and well-being outcomes is generally stronger than the association between emotion-focused coping strategies and the same outcomes, and thus the latter type of coping has been studied less often (McKee-Ryan & Kinicki, 2002; Solove et al., 2015).

Measures of Coping Strategies

The two most commonly used measures of job loss coping are Leana and Feldman's (1990) Coping Strategies Scale (CSS) and Kinicki and Latack's (1990) Coping with Job Loss Scale (CWJLS). The CWJLS is the more commonly used scale in the research literature. Its five factors are categorized as either control-oriented (proactive search, non-work organization, and positive self-assessment) or escape-oriented (distancing from loss and job devaluation). One issue with this scale is that it

includes only a narrow set of emotion-focused coping strategies, which can include not only denial, distancing, and minimization strategies, but also expressing one's emotions and accepting one's situation, among other strategies for processing one's emotions (Austenfeld & Stanton, 2004). Furthermore, the CWJLS does not contain items related to social engagement or support that are non-job search related. It also has very limited content representation related to managing one's non-work time. There may therefore be significant limitations with Kinicki and Latack's (1990) scale in terms of capturing the range of strategies people use to cope with the psychological challenges of unemployment.

Leana and Feldman's (1990) CSS categorizes its six factor-analysis derived factors as problem-focused (self-initiated job search activities, seeking education and/or training, and investigating geographical re-location) or symptom-focused (applying for financial assistance beyond unemployment insurance, community activism, and seeking social support). They differentiated problem-focused from symptom-focused strategies by describing the former as behaviors aimed at finding a new job and the latter as ameliorating the negative emotional effects of a job loss. As mentioned previously, later studies have typically merged symptom-focused strategies with emotion-focused coping, though they do not perfectly overlap (e.g., Hanisch, 1999). One issue with Leana and Feldman's scale is that they include some categories that are not as likely to be used by a majority of unemployed persons, such as re-locating or community activism. Furthermore, they do not fully include such potentially useful strategies as emotional regulation, time management, and financial management.

In sum, the two most commonly used measures of job loss coping have significant gaps in terms of their comprehensiveness. Furthermore, many job loss coping studies have exclusively defined coping in terms of job search behaviors and have thus only used job search scales to measure coping (cf. Liu et al.'s, 2014, meta-analysis). Such measures fail to represent other strategies that are used to solve the problem of unemployment and/or manage emotional distress related to job loss (e.g., enhancing one's longer-term employability and managing one's time). Another limitation in the job loss coping literature is that emotion-focused coping after job loss is often measured with scales that are not domain-specific (e.g. Abebe & Welbourne, 2015). For example, some studies have used emotion-focused items from Carver's (1997) brief COPE scale, a scale that was not created specifically for the job loss domain, but one that was originally validated with hurricane survivors and meant to capture generalized emotion-focused coping. While such general coping strategies may be useful, they may not adequately capture the unique challenges of job loss and there is ample research showing that stronger relations are likely to accrue when predictors match dependent variables in terms of domain and content specificity (Bandura, 1997).

To address the problem of construct representation, the current study employed a measure of coping strategies designed to capture a wider range of coping options than that included in Kinicki and Latack's (1990) or Leana and Feldman's (1990) scales. The measure, termed the Coping with Unemployment Scales (CUES; Lent et al., 2022), was created as part of an earlier measure development and validation study, and served as a foundation for the current study. Its content and

validation procedures are described in the Methods section. The present study also sought to expand the CUES measure through the addition of financial management strategies, requiring re-examination of the measure's factor structure.

Coping Strategies and Well-Being Outcomes

Fewer studies have examined the relation of coping strategies to well-being outcomes compared to the many studies that have examined how coping strategies, especially problem-focused coping strategies, relate to re-employment outcomes. In terms of coping and well-being outcomes, McKee-Ryan et al. (2005) found no relationship between job search effort and life satisfaction or perceived physical health, but did find that job search effort was weakly associated with worse mental health ($r = -.11$); this has been confirmed in more recent studies (e.g. Lin & Leung, 2010). This points to the idea that while job search behavior is necessary, it can be stressful and take its toll on mental health. The same meta-analysis found a weak association between other problem-focused coping behaviors (e.g., reviewing work qualifications and skills or dealing with finances) and better mental health ($r = .17$). Similarly, emotion-focused coping (e.g., seeking social support or minimizing the job loss) and well-being outcomes have been shown to have a weak, positive association ($r = .14$) in the McKee-Ryan et al. (2005) meta-analysis and in a more recent study (Lin & Leung, 2010).

Coping Strategies and Re-Employment Outcomes

A number of studies have focused on how coping strategies relate to re-employment outcomes, with the primary focus being on the effect of problem-focused

coping on re-employment outcomes. The most prominent finding from Kanfer et al.'s (2001) meta-analysis is that job search behaviors are positively associated with number of job offers and re-employment status, and negatively associated with length of unemployment. (Since the proposed study is focused on psychological outcomes, additional findings on the association between problem-focused coping and re-employment outcomes can be found in the extended literature review). The association between emotion-focused coping strategies and re-employment is less well studied, with two studies finding no relationship (Leana & Feldman, 1990; Solove et al., 2015) and two studies finding a positive relationship (Gowan et al., 1999; Leana & Feldman, 1995). These four studies used either the Leana and Feldman (1990) or Kinicki and Latack (1990) emotion-focused coping subscales which, as noted earlier, may represents a limited range of coping strategies. Additional details are provided in the extended literature review.

Personal and Social Coping Resources

Coping strategies are deployed in the context of the fund of coping resources (e.g., social support system, financial savings) that unemployed individuals have at their disposal. Coping resources are important because of their effect on how people appraise a stressor (e.g., job loss), such that those with a higher level of coping resources cognitively appraise a stressor as less stressful (Latack et al., 1995; Lazarus & Folkman, 1984). Because use of coping strategies is determined, in part, based on one's appraisal of a particular stressor such as job loss, this is one way by which coping resources indirectly impact coping strategies and well-being. However, one's perceived coping resources also have a direct effect on what coping strategies are

available to be deployed to mitigate the impact of involuntary unemployment (McKee-Ryan & Kinicki, 2002). Moreover, coping resources do not remain constant over the course of unemployment, but typically decrease over time (Latack et al., 1995).

McKee-Ryan et al.'s (2005) meta-analysis looked at four categories of coping resources: personal (e.g. locus of control, self-esteem, generalized self-efficacy, and emotional stability), social (e.g. support of friends and family), financial (e.g. perceived financial resources, household income, and savings), and time structure (e.g. time, routine, and sense of purpose). All four types of coping resources were found to be significantly and positively correlated with the mental health of unemployed individuals. In addition, personal, social, and financial resources were significantly and positively correlated with life satisfaction, but only personal resources were significantly and positively related to physical health (McKee-Ryan et al., 2005). Other studies have operationalized coping resources differently; these are covered in the extended literature review section.

Theoretical Models of Job Loss and Unemployment Coping

Although rigorous empirical research on job loss began with the Great Depression, it has been argued that psychological research on the outcomes of job loss was “dismally non-theoretical” until the mid-1980s (Fryer, 1986, p. 4), with the notable exception being studies based on Marie Jahoda's (1981) early work during the 1930s through 1950s and her later unemployment deprivation model. The latter model centers around the idea of latent deprivation caused by job loss. Specifically, Jahoda (1981) argued that, in addition to the manifest consequence of losing one's

salary, losing a job has five latent consequences, namely, the loss of (a) structured time, (b) enforced activity, (c) valued social relationships and shared experiences, (d) greater collective purpose, and (e) identity and status. Jahoda posited that the loss of these latent benefits of employment is what leads to diminished well-being.

Latent deprivation theory is the basis of early research on job loss and job loss coping, and is still influential today (Gowan, 2014). However, Jahoda's theory has been criticized for assuming that a full-time job is always better for well-being than is unemployment, and for conceptualizing the unemployed individual as passive, inactive, and unstructured (Gowan & Gatewood, 1997). Later theories in the 1980s and 1990s addressed these criticisms by focusing on the psychology and agency of unemployed individuals after a job loss, leading to models that included the role of stress, stress appraisal, and stress coping (Gowan & Gatewood, 1997). Newer models have examined specific sub-populations (e.g. Wanberg et al., 2016), examined specific elements of re-employment outcomes (e.g. Zikic & Klehe, 2006), or have drawn from a wider array of theories (e.g. Wanberg et al., 2002).

Career Self-Management Model of Social Cognitive Career Theory

As noted earlier, recent research has conceptualized the job loss coping process by looking at re-employment after a job loss through the lens of career planning, adaptability, and self-management (Gowan, 2014; Koen et al., 2010; Zikic & Klehe, 2006). In keeping with the self-management theme, Thompson et al. (2017) examined job loss and recovery through the lens of the CSM model, which had been developed to study a wide range of career process behaviors, including how people

manage normative career tasks and cope with career setbacks, such as job loss and unemployment (Lent & Brown, 2013; see Figure 1).

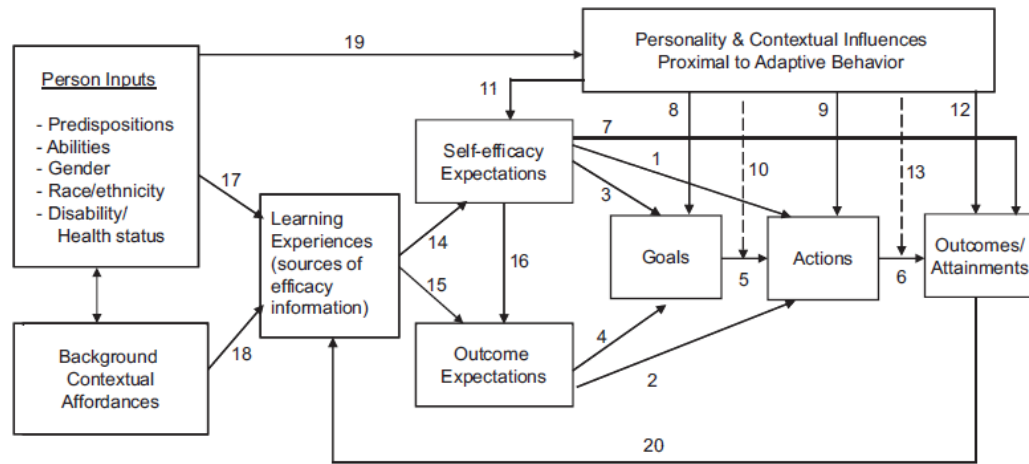


Figure 1. The Career Self-Management Model. Copyright 2013 by R. W. Lent & S. D. Brown. Reprinted with permission.

Only two studies have applied the CSM model to job loss (Dahling et al., 2013; Lim et al., 2016) and both have done so in the context of job search and re-employment. Outside of the CSM model, most instances of the core social cognitive variables (self-efficacy, outcome expectations, and goals) in the job loss coping domain have also been operationalized in terms of job search and re-employment. As this review has shown, how one copes with unemployment after a job loss is relevant to re-employment outcomes and psychological outcomes, and a comprehensive examination of job loss coping should extend beyond job searching behaviors alone and include other strategies (such as emotional, financial, social, and temporal coping behaviors) that may help manage the psychological challenges of unemployment. Furthermore, the literature is particularly sparse regarding how non-re-employment focused coping strategies affect the psychological well-being outcomes of

unemployed individuals. These gaps are addressed by applying the CSM model to examine how a variety of psychologically related unemployment coping strategies, along with psychological coping self-efficacy, relate specifically to psychological well-being outcomes.

Research Questions and Hypotheses

Considering the many important roles that work plays in people's lives, it is no surprise that unemployment has been shown time and again to be closely linked to negative mental health outcomes and decreased well-being (McKee-Ryan et al., 2005; Paul & Moser, 2009). Furthermore, becoming unemployed during one's professional lifetime has become more common, and thus it makes sense to view job loss, coping with unemployment, and its outcomes through the lens of career self-management (Gowan, 2014; Pignault & Houssemand, 2017). Therefore, it is important to understand the mechanisms that mitigate the negative effects of unemployment and ultimately lead to better psychological well-being outcomes, situated in a career-self management model.

The present study examines the role of social support, financial strain, proactive personality, psychological coping self-efficacy, and psychological coping strategies in predicting well-being outcomes after a job loss. More specifically, this study tests the following hypotheses, based on the model in Figure 2 (see below).

H1: Proactive personality will correlate significantly and positively with (a) psychological coping self-efficacy, and (b) psychological coping behaviors.

H2: Unemployment social support will correlate significantly and positively with (a) psychological coping self-efficacy, (b) psychological coping behaviors, (c) well-being, and (d) negatively with psychological distress.

H3: Financial strain, a coping barrier, will correlate significantly and negatively with (a) psychological coping self-efficacy, (b) psychological coping behaviors, (c) well-being, and positively with (d) psychological distress.

H4: Self-efficacy for psychological coping with unemployment will correlate significantly and positively with (a) psychological coping behaviors, (b) well-being, and negatively with (c) psychological distress.

H5: Psychological coping behaviors will correlate significantly and positively with (a) well-being and negatively with (b) psychological distress

H6: Social support, proactive personality, financial strain, psychological coping self-efficacy, and psychological coping behaviors will, collectively, explain a significant amount of variation in (a) well-being and (b) psychological distress.

H7: Each individual predictor from H6, except for proactive personality, will account for unique variation in (a) well-being and (b) psychological distress.

H8: The proposed model will provide an adequate fit to the data.

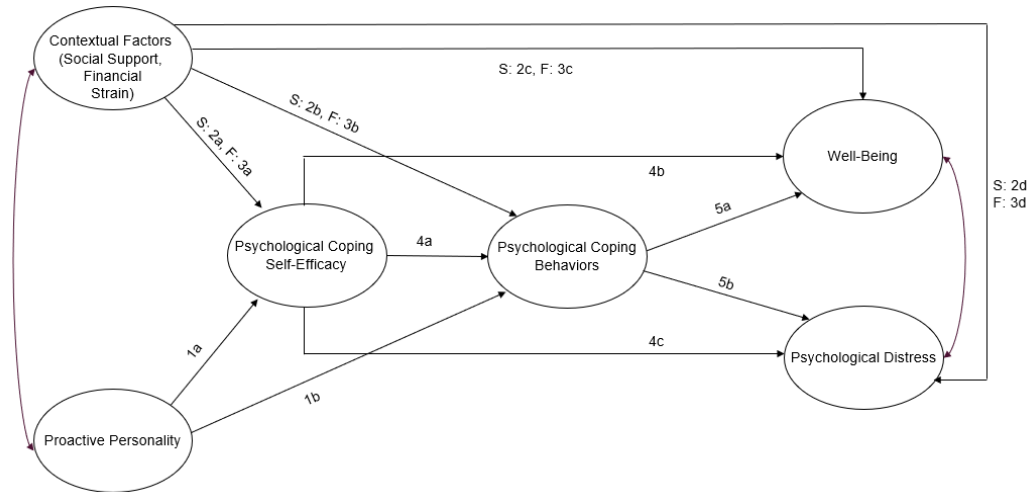


Figure 2. A Career Self-Management Model of Coping with Unemployment. *Note:* the path numbers are referred to in the text. S = social support, F = financial strain.

Method

Design

The present study employs a cross-sectional, correlational design and includes a set of predictor variables representing the SCCT CSM constructs of self-efficacy, coping behaviors, personality, supports, and barriers applied to the domain of unemployment. The dependent variables reflect psychological well-being and distress outcomes.

Participants

This study drew its participants from a nationwide population of adults and specifically targeted U.S. workers who were (a) unemployed at the time of participation due to the involuntary loss of a full-time job and (b) actively seeking full-time work. Participants were between 25 to 44, putting them in the establishment phase of their careers (Super, 1980). Limiting participants to this age range not only

controlled for career stage, but also encompassed the age range with the highest unemployment numbers (U.S. Bureau of Labor Statistics, 2022). Furthermore, at the time of survey all participants were unemployed for a duration of 2 to 9 months, a period during which the toll of unemployment on mental health tends to be most pronounced (Paul & Moser, 2009).

A total of 602 valid, completed responses were obtained for this study, separated randomly into roughly one third of the sample ($n = 196$) in the measure development phase and two thirds ($n = 406$) in the confirmatory factor analysis and hypothesis testing phase. Specifically, data from the first sub-sample were used to determine if the newly expanded coping with unemployment measure and the newly developed self-efficacy for psychological coping measure yielded psychometric properties that were adequate for subsequent hypothesis testing. The data from the second sub-sample was then used in a hypothesis testing phase. Gorsuch's (1997) and Hu and Bentler's (1999) guidelines for exploratory factor analysis (EFA) and structural equation modeling (SEM), respectively, suggested that 150 participants for EFA and 250 participants for SEM would constitute sufficient sample sizes for the analyses to be used.

For the measure development phase, the sub-sample of 196 participants represented Super's (1980) full career establishment phase age range, from 25 to 44 ($M = 35.19$, $SD = 5.47$). Participants were 51% male and 49% female; sixty-nine percent were White or European American, 14% were Black or African American, 8% were Latinx or Hispanic American, 4% were Asian/Pacific Islander American, 4% were multiracial, and 1% were Native American. In terms of highest level of

education attained, 2% had some high school, 31% were high school graduates, 25% had some college, 18% had an associate's degree, 17% had a bachelor's degree, 4% had a master's degree, 2% had a professional degree, and 2% had a doctoral degree. For household income, 19% reported less than \$15,000, 20% reported \$15,000 - \$24,999, 29% reported \$25,000 - \$49,999, 10% reported \$50,000 - \$74,999, 13% reported \$75,000 - \$99,999, 6% reported \$100,000 - \$149,999, 2% reported \$150,000 - \$199,999, and 1% reported \$200,000 or more. Seventy-seven percent reported being unemployed following a full-time job loss, whereas 23% reported being currently under-employed following a full-time job loss. Respondents spanned all 16 Occupational Information Network (O*NET) career clusters, which are categories of jobs that belong in the same field of work and that require comparable skills, though the most commonly chosen career cluster option was the write-in option (27%) (National Center for O*NET Development, 2022). Regionally, 40% of participants came from the South, 24% from the West, 19% from the Midwest, and 17% from the Northeast.

For the hypothesis testing phase, the sub-sample of 406 participants also spanned Super's (1980) career establishment phase in terms of age, ranging from 25 to 44 ($M = 34.50$, $SD = 5.23$). They were 54% male and 46% female; sixty-nine percent were White or European American, 13% were Black or African American, 11% were Latinx or Hispanic American, 4% were multiracial, 3% were Asian/Pacific Islander American, and 2% were Native American. In terms of highest level of education attained, 4% had some high school, 30% were high school graduates, 28% had some college, 17% had a bachelor's degree, 10% had an associate's degree, 9%

had a master's degree, 1% had a professional degree, and less than 1% had a doctoral degree. For household income, 21% reported less than \$15,000, 16% reported \$15,000 - \$24,999, 27% reported \$25,000 - \$49,999, 13% reported \$50,000 - \$74,999, 11% reported \$75,000 - \$99,999, 8% reported \$100,000 - \$149,999, 3% reported \$150,000 - \$199,999, and 1% reported \$200,000 or more. Seventy-three percent reported being unemployed following a full-time job loss, whereas 27% reported being currently under-employed following a full-time job loss. Respondents spanned all 16 Occupational Information Network (O*NET) career clusters, though the most commonly chosen career cluster option was the write-in option (21%). Regionally, 41% of participants came from the South, 23% from the Midwest, 20% from the West, and 17% from the Northeast. Demographics information for both phases of this study are presented in Table 1.

Measures

The measures for this study consist of extant measures of personality, contextual supports, and barriers related to unemployment, along with a measure of unemployment coping strategies (the CUES measure; Lent et al., 2022), and a new companion measure of self-efficacy for psychological coping with unemployment. The expanded version of the CUES measure and the self-efficacy measure were reviewed and edited by a team of SCCT researchers (one SCCT research expert and three doctoral students in counseling psychology). The new measures were tested on an initial measurement development sub-sample so that they could be subjected to EFA in addition to reliability and validity estimation. The coping behavior and self-

efficacy measures were then subjected to confirmatory factor analyses and hypothesis testing in the second sub-sample.

Predictor and Validity Estimation Variables

Coping with Unemployment Scales (CUES; Lent et al., 2022)

Strategies for coping with unemployment were measured with an 18-item self-report scale, recently developed and validated in an earlier study (Lent et al., 2022).

The present study attempted to expand the scale by adding financial management items, but those items were not retained in the 15-item final version of the scale used in this study, which ultimately replicated the basic factor structure found in the earlier study. Based on the EFA results of this study, the final CUES measure was determined to consist of two subscales; the first, termed the Coping with Unemployment Scales – **Job Search Coping (CUES-JSC)** is a 5-item active job search activities subscale, adapted from the active job search behavior (AJSB) items in Blau's (1993) job search measure. Blau's original AJSB subscale showed high adequate internal consistency ($\alpha = .80$) and correlated moderately ($r = .38-.49$) with two other job search subscales (preparatory job search behavior and general effort job search). In revising the AJSB items for the CUES measure, items were updated to reflect changes in the job search process that have occurred in the decades since the AJSB's original publication in 1993.

The second CUES subscale, termed Coping with Unemployment Scales – **Psychological Coping (CUES-PC)**, consists of 10 items focused on socio-emotional and temporal coping behaviors. This subscale originated as a list of different forms of

coping, aside from active job searching, created to reflect the different ways that unemployed people cope with the psychological challenges of being out of work; the original item development was informed by the existing unemployment coping literature, and to a lesser degree, the adjustment to retirement literature, with a particular focus on how people might cope with the loss of the latent benefits of a full-time job. Note that the current study is focused primarily on psychological coping (i.e., the CUES-PC) rather than job search coping.

As a whole, the approach to the development of CUES shares some similarities with Muller et al.'s (2005) approach to developing their Latent and Manifest Benefits Scale (LAMB); in their case, they based their scale on Jahoda's (1981) work on the manifest and latent benefits of work. However, the LAMB scale focuses on the advantages that employment offers, enumerated by Jahoda, that are lost when someone becomes unemployed. By contrast, the CUES-PC focuses on coping strategies that compensate for the lack of access to the benefits that work offers and is not based on the content domains identified by Jahoda, though there is content overlap. The development of the CUES measure in the original study (Lent et al., 2022) included review by a team of four SCCT researchers (one SCCT research expert and three doctoral students in counseling psychology), with additional feedback and suggestions provided by four vocational psychology experts and four lay people who had personally experienced an involuntary job loss.

In the CUES, participants indicated the degree to which they had used the various coping strategies over the past two weeks. In the original study, results from an EFA and a confirmatory factor analysis offered support for a 2-factor structure.

Sample items include “taken the time to organize my day in a structured way” (CUES-PC scale) and “completed a job application” (CUES-JSC scale). Responses are made on a 5-point scale anchored from 0 (“Not at all”) to 5 (“A great deal”), with higher scores indicating greater use of coping strategies over the past two weeks. Items were interspersed on the measure in order to minimize response biases.

In the initial study on the CUES measure (Lent et al., 2022), the CUES-PC and JSC sub-scales yielded reliability estimates, respectively, of $\alpha = .91$ and $.82$ in one sub-sample ($n = 200$) and $.92$ and $.87$ in a second sub-sample ($n = 312$). The two sub-scales were highly interrelated ($.54$ to $.65$) in the two sub-samples and were also found to relate moderately to strongly, and in theory-consistent ways, with the more established Coping With Job Loss Scale (Kinicki & Latack, 1990). For example, the CUES-PC tended to relate more highly with indicators of emotion-focused coping, while the CUES-JSC correlated more strongly with indicators of problem-focused (i.e., job search oriented) coping. In the measure development phase of the present study, $\alpha = .88$ for the CUES-PC scale and $\alpha = .87$ for the CUES-JSC scale. In the hypothesis testing phase of the present study, $\alpha = .90$ for CUES-PC scale and $\alpha = .87$ for the CUES-JSC scale. The factor structure and validity estimates of the current version of the CUES measure will be reported in the Results section.

It should be noted that this version of the CUES differed from the original version in that the present study aimed to expand the original CUES measure by adding six items focused on coping with financial challenges. The original CUES measure also contained financial coping items, but they did not produce a stable, distinctive factor (Lent et al., 2022). Two of them loaded highly on the psychological

copied factor, two were eliminated due to cross-loadings, and two loaded together on a financial coping factor, but were only moderately interrelated. The results were, therefore, ambiguous regarding the presence and structure of financial management as a distinct coping dimension.

Despite the psychometric limitations of the original financial coping item set, financial strain was found to predict lesser emotional well-being and greater psychological distress. It was reasoned that a better measure of financial coping might provide a key pathway through which the adverse effects of financial strain on psychological functioning could be managed. To examine this possibility, the financial coping items were revised for this study in an effort to strengthen their construct representation. Specifically, items were added to reflect a greater range of actions that could be taken on an ongoing basis to cope with financial challenges (e.g., “Spent some of my savings to pay for living expenses”, “Cut back on expenses that are non-essential to make my money stretch further”).

Self-Efficacy for Psychological Coping with Unemployment Scale (PCUE-SE)

A new self-efficacy scale was developed to examine perceived ability to utilize psychological (i.e. non job search related) coping strategies related to unemployment. This measure was created using the SCCT measurement guide of Lent and Brown (2006). The guide advises that social cognitive predictors and dependent variables should reflect corresponding content, contextual, and temporal dimensions. Thus, this new measure reflects content domains (e.g., psychological and financial coping) that were either established or conceptually posited for the CUES behavioral coping measure, though with different instructions, scaling, and item

wording. For example, while the CUES asks the degree to which someone had “taken the time to organize my day in a structured way”, the self-efficacy scale asks the degree to which someone has confidence in their ability to perform similar behaviors.

The PCUE-SE does not include content parallel to confidence at job search behaviors because there is a separate, existing self-efficacy scale that was used to represent this domain (see JSSE-B; Appendix C). Based on EFA results in this study’s measure development phase (presented in the Results section), the PCUE-SE was found to consist of a single, 11-item factor reflecting confidence at coping with a variety of unemployment challenges (including social, emotional, temporal, and financial facets), organized under the conceptual umbrella of psychological coping self-efficacy. Participants were asked to indicate the degree to which they have confidence in their ability to engage in each behavior along a 5-point scale anchored from 1 (“No confidence at all”) to 5 (“Complete confidence”), with higher scores indicating greater self-efficacy. A sample item is “find ways to organize and structure my day in a productive matter”. For both the measure development and hypothesis testing sub-samples of the present study, Cronbach’s alpha for this scale was .91.

Job Search Self-Efficacy Behavior (JSSE-B; Saks et al., 2015)

The JSSE-B, a 10-item measure of job search self-efficacy, was used to help estimate the validity of the PCUE-SE scale. A sample item is “plan and organize a weekly job search schedule”. Responses are on a 5-point scale anchored from 1 (“Not at all confident”) to 5 (“Totally confident”), with higher scores indicative of higher job search self-efficacy. The JSSE-B produced an alpha coefficient of $\alpha = .89$ in the original study, and was found to have a medium correlation ($r = .42$) with job search

intention and small-to-medium correlations ($r = .25$ and $.42$) with job search behavior, depending on the time period measured. In this study, JSSE-B scores were expected to have a positive, medium relationship with the PCUE-SE scale score, which would indicate that self-efficacy for psychological coping with unemployment covaries with, but is largely distinct from, job search coping self-efficacy. In the present study, the measure development sub-sample's α was $.91$ for this scale; for the hypothesis testing sub-sample, it was $\alpha = .90$.

Proactive Personality Scale – Shortened Version (PPS; Seibert et al., 1999)

Proactive personality was measured with Seibert et al.'s (1999) 10-item version of the Proactive Personality Scale, which was derived from the original 17-item measure (Bateman & Crant, 1993). This self-report scale considers proactive personality as a stable disposition toward proactive behavior (Seibert et al., 1999). Because the PPS tended to correlate highly with career and employment related self-efficacy in prior research (Fuller & Marler, 2009), it also serves as a secondary measure to help estimate the validity of the PCUE-SE measure. PPS scores were expected to have a positive, medium relationship with the PCUE-SE scores, indicating that a proactive disposition and self-efficacy for psychological coping with unemployment are related, but distinct constructs. Respondents indicate the degree to which they agree or disagree with such statements as "If I see something I don't like, I fix it". Responses are made on a 7-point scale anchored from 1 ("Strongly disagree") to 7 ("Strongly agree"), with higher scores indicating a more proactive personality. The original Bateman and Crant scale produced an α of $.87$ to $.89$ in three separate samples, with a test-retest reliability of $r = .72$ over three months. They also

found that the scale correlated with measures of extraversion, conscientiousness, need for achievement, and need for dominance.

Seibert et al. (1999) found that their briefer version correlated very highly with the original scale ($r = .96$) and produced an alpha coefficient of .86. They also found that proactive personality was positively associated with various objective and subjective measures of career success (also see Fuller & Marler, 2009). Among unemployed people, proactive personality has been found to relate positively to the tendency for routine and planning in one's use of time, ability to organize one's day effectively, sense of purpose, and persistence in one's activities (Van Hoye & Lootens, 2013). It was also found to positively predict job search intensity among older workers (Zacher, 2013) and job search success among college graduates, partially mediated by job search self-efficacy and job search behaviors (Brown et al., 2006). In the present study, reliability estimates for this measure were $\alpha = .92$ and .91 in the measure development and hypothesis testing phases, respectively.

Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, et al., 1988)

Social support for unemployment was measured with the MSPSS, a 12-item self-report scale examining social support that consists of three factors representing different sources of support (i.e. family, friends, and significant others), though total scale scores will be used for the purposes of this study's measure development phase. The instructions for this scale were modified from "we are interested in how you feel about the following statements" to "we are interested in how you feel about the following statements in relation to your job loss", thus framing support within the

specific context of unemployment. Respondents indicated how they felt about each statement item; a sample item is “I can talk about my problems with my friends”. Responses are on a 7-point scale anchored from 1 (“Very strongly disagree”) to 7 (“Very strongly agree”), with higher scores indicative of greater social support.

The original Zimet et al. (1988) study produced a total scale alpha coefficient of .88 and subscale $\alpha = .85-.91$. They also found that social support correlated negatively with depression and anxiety. Although the MSPSS has not typically been used to assess social support in relation to unemployment coping, its psychometric properties compare favorably with other measures of general social support (e.g. the Social Support Index; Abbey, Abramis, & Caplan, 1985) that have been used in unemployment studies. The version of the scale used in this present study (i.e. asking respondents to specifically indicate their social support in relation to unemployment coping) was also used in the initial CUES measurement development study (Lent et al., 2022). In that study, the MSPSS produced a total scale alpha coefficient of .94. Scale reliability estimates for the present study are $\alpha = .93$ in the measure development phase and .92 in the hypothesis testing phase. Note that, consistent with Figure 2, proactive personality and social support were assumed to covary in the present study, given prior evidence that proactive personality tends to correlate with various measures of social support; e.g. Fawehinmi & Yahya (2018).

Perceived Social Support for Job Search Activity Scale (PSSJSAS; Rife & Belcher, 1993)

Social support for one’s job search efforts was measured with the PSSJSAS, an 8-item self-report scale. Respondents are asked to indicate the extent to which they

agree or disagree with each item; a sample item is “Others encourage me to continue searching for a job even when I feel down”. Responses are on a 5-point scale anchored from 1 (“strongly disagree”) to 5 (“strongly agree”), with higher scores indicative of greater job search social support. Rife and Belcher’s (1993) original study produced an alpha coefficient of .84 for this scale, and showed a positive relationship between job search social support and job search intensity. In this study, a 7-item version of the scale was used due to the poor performance of one of the reverse-coded items. For this study, the coefficient alpha for the measure development phase was .80; it was .81 for the hypothesis testing phase. The PSSJSAS was used in this study’s measure development phase to facilitate examination of the extent to which the use of psychological coping strategies and resources (i.e., the CUES-PC, PCUE-SE, and MSPSS) predict the psychological well-being and distress outcomes above and beyond coping strategies and resources that are specific to job search behavior (i.e., the CUES-JSC, JSSE-B, and PSSJSAS).

Financial Strain Scale (FSS; Ullah, 1990)

Financial strain, a contextual barrier in the model, was measured with the FSS, a 4-item self-report scale based on items used in earlier studies (Payne, Warr, & Hartley, 1984; Warr & Jackson, 1987). Respondents indicate how often they have experienced financial challenges during the last two weeks (the original scale specified the last four weeks). A sample item is “How often have you not been able to do the things you need to do because of shortages of money?”. Responses are made on a 4-point scale anchored from 1 (“Never”) to 4 (“All of the time”), with higher scores indicating greater financial strain. In the original Ullah (1990) study, $\alpha = .77$.

Ullah also found that the FSS correlated with higher general psychological distress, a higher number of job applications submitted, and a lower level of structured use of one's time. In the present study, for the measurement development and hypothesis-testing phases, $\alpha = .91$ and $.90$, respectively.

Outcome Variables

Depression, Anxiety, and Stress Scale Short Form (DASS-21; Lovibond & Lovibond, 1995)

Psychological distress was measured by the DASS-21, a 21-item shortened version of Lovibond and Lovibond's (1995) original 42-item DASS. Respondents are asked to indicate the response that best describes how often they have felt a specific way during the past week; in this study, the period was changed to two weeks, with instructions modified accordingly. A sample depression subscale item is "I felt that I had nothing to look forward to"; a sample anxiety subscale item is "I felt I was close to panic"; and a sample stress subscale item is "I found it difficult to relax". Responses are on a 5-point scale anchored from 0 ("Did not apply to me at all") to 5 ("Applied to me very much, or most of the time"), with higher scores indicating greater depression, anxiety, and/or stress. In Henry and Crawford's (2005) study providing normative data in a large, non-clinical sample, they found a total scale alpha coefficient of $.93$, and subscale $\alpha = .88$ for the depression subscale, $\alpha = .82$ for the anxiety subscale, and $\alpha = .90$ for the stress subscale.

The DASS-21 has been found to relate negatively to positive affect and positively to negative affect (Henry & Crawford, 2005). Another study using the

DASS-21 in a non-clinical sample found that the total scale score was most related to a measure of mixed depression and anxiety (Osman et al., 2012). The DASS-21 has not typically been used in unemployment coping studies. However, compared to other measures of negative emotional states that have been used in unemployment studies (e.g. the General Health Questionnaire; Goldberg, 1979), the DASS-21 compares favorably in its psychometric properties. For the present study, in the measure development phase, for the total scale, $\alpha = .96$; $\alpha = .94$ for the depression subscale, and $\alpha = .90$ for both the anxiety and stress subscales. For the hypothesis testing sample, these reliability estimates were, respectively, .96 (total scale), .93 (depression subscale), and .89 (anxiety and stress subscales). (Note that, consistent with Figure 2, psychological distress and psychological well-being were assumed to covary in the present study).

World Health Organization 5-Item Well-Being Index (WHO-5; World Health Organization, 1998)

Psychological well-being was assessed with the WHO-5, a 5-item shorter version of the WHO-10, itself a shortened version of the original WHO-28. Respondents are asked to indicate how they have felt over the past two weeks. A sample item is “I woke up feeling fresh and rested.” Responses are made on a 6-point scale anchored from 0 (“At no time”) to 5 (“All of the time”), with higher scores reflecting greater well-being.

A systematic review of this widely used scale reported high clinimetric validity and high specificity and sensitivity as a screening tool for depression, but did not report specific validity or reliability estimates (Topp et al., 2015). One recent

study (Krieger et al., 2014) produced scale alpha coefficients of .83 - .95 and showed a strong, negative relationship between the WHO-5 and depressive symptoms, particularly when symptoms were in the mild to moderate range. In a Sri Lankan population, the WHO-5 scores showed a moderate-to-strong, negative relationship ($r = -.45$) with the Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001), a measure of depression severity, and a strong, negative relationship ($r = -.56$) with the Kessler Psychological Distress Scale (K-10; Kessler et al., 2002), a measure of psychological distress (Perera et al., 2020). In a recent employment-related study (McLoughlin et al., 2021), the WHO-5 produced an alpha coefficient of $\alpha = .92$. In the present study, $\alpha = .91$ in the measure development phase and $\alpha = .92$ in the hypothesis testing phase.

Procedures

A 15-minute online Qualtrics survey containing all the above measures was created, along with a recruitment advertisement explaining to prospective participants the participation criteria for a study examining coping with unemployment (see Appendix J). Participant recruitment was conducted by Qualtrics Research Services (QRS), a third-party vendor that has created a nationwide network of survey and market research organizations with on-demand research participants. Interested prospective participants clicked on a link that led to a few screening questions (asking if they were U.S. residents who had lost a job involuntarily in the last 2-9 months, were currently looking for a full-time job, and were ages 25-44) to determine their eligibility. If they were deemed eligible, they were directed to an IRB-approved consent page (Appendix K) describing the study and asked to indicate their consent

by selecting the “Yes I consent to participate” option at the end of the consent form. They were also informed that they could exit the survey at any time by closing their web browsers.

For the purpose of describing the sample, participants were asked to provide relevant demographic and job search information at the end of the survey (Appendix L). They were also provided with an end-of-survey message with resources that may be useful in coping with unemployment and finding new employment (Appendix M). Participants who completed the study were given a modest incentive by QRS such as credit towards gift cards. Several steps were taken to screen out inattentive responders: (a) two attention check items were placed at about 1/3 and 2/3 of the way through the survey, (b) a CAPTCHA requirement was used to prevent bot responses, and (c) a lower limit response time (1/2 the median response time during the survey soft launch) was set to identify inattentive speeders.

Results

Of the 6,762 respondents who accessed the Qualtrics survey, 1,472 qualified based on the screening criteria. Of those, 20 were eliminated because they did not provide informed consent; 127 were eliminated because they produced unreasonably brief response times (i.e., less than 7.5 minutes, which was $\frac{1}{2}$ the median response time during the survey soft launch) or invalid response patterns (i.e. straight-lining); 3 were eliminated because they did not pass the CAPTCHA filter; 480 were eliminated because they failed an attention check item; and 240 were eliminated because they ended their responses prior to completing the demographics questions. Data from these eliminated respondents were deleted listwise. The final data set of 602 valid, completed responses met and exceeded the target number of responses needed to achieve adequate statistical power. Roughly one-third of the sample was subsequently split randomly into a measurement development sub-sample ($n = 196$), with the remaining sub-sample employed in hypothesis testing ($n = 406$).

Exploratory Factor Analysis

Coping with Unemployment Scales

The Coping with Unemployment Scales (CUES), with the addition of the new financial management items, was subjected to a Kaiser-Meyer-Olkin (KMO) test of sampling adequacy, producing a value of .89 and a significant Bartlett's test of sphericity ($p < .001$), supporting the viability of factor analysis. As suggested by Fabrigar et al. (1999) and Worthington and Whittaker (2006), because of the likelihood of correlated factors, the principal-axis method of factor extraction with

oblimin rotation was chosen. Eigenvalue, scree plot, parallel analysis, and factor interpretability criteria initially pointed to a three-factor solution. Displayed in Table 2, two of the three factors (psychological coping behaviors, 13 items; job search coping behaviors, 6 items) replicated the structure found in the initial CUES measurement development study (Lent et al., 2022); the third factor was compromised of five of the six new financial management items.

To decide which items to retain, Worthington and Whittaker's (2006) recommendations to decide upon a relatively high factor loading minimum ($|.40|$) and a relatively low cross-loading absolute magnitude difference ($|.15|$) were followed. In the initial three-factor solution, four items were eliminated due to a less than $|.15|$ difference between the top two factor loadings of each item; furthermore, three of these four eliminated items also had their largest factor loadings in the $.21 - .34$ range. After eliminating these items, the remaining items loaded on one of the three factors. For the psychological coping behaviors factor ($\alpha = .88$), 10 of the 11 items retained in the final factor iteration were kept for the final version of the scale; deleting the item with the lowest factor loading coefficient did not affect the internal consistency coefficient and improved the interpretability of the factor. For the job search coping behaviors factor ($\alpha = .87$), all 5 items from the factor analysis were kept for the final scale. The 4-item third factor, financial coping, produced a low internal consistency estimate of $\alpha = .64$.

A four-step hierarchical regression strategy was next used (a) to assess the incremental validity of the set of psychological coping variables relative to the job search predictors and (b) to help determine whether to retain the financial coping

items in light of their low reliability estimate. Specifically, the two dependent variables, DASS-21 and WHO-5, were each regressed on the following predictor sets, entered in order: (a) proactive personality and financial strain at step one; (b) the set of job search coping variables (job search coping behaviors, job search self-efficacy, and job search support) at step two; (c) the set of psychological coping variables (psychological coping behaviors, self-efficacy for psychological coping, and social support) at step three; and (d) the financial management variable at step four.

As shown in Tables 3 and 4, the block of psychological coping variables accounted for unique predictive variance at step three of both equations, explaining 7% and 5% unique variation in WHO-5 and DASS-21 beyond the prior predictor sets. The financial management coping behaviors did not, however, explain significant unique variance at step four. To examine the possibility that financial coping might moderate (i.e., lessen) the relation of financial strain to the dependent variables, supplementary analyses were also conducted in which the financial strain x financial coping interaction term was entered at the final step of the equation (after centering all predictors). In each case, the interaction was not significant (for well-being, $B = -.06$; for distress, $B = .07$), suggesting that financial coping did not buffer participants from the effect of financial strain on the psychological outcomes. Along with the low internal consistency of the financial coping sub-scale, the insignificant incremental utility of financial coping as a main effect and moderator provided a rationale for eliminating it from the final version of the CUES to be used in the hypothesis testing phase of this study. On the final 2-factor version of the CUES, all retained items had a factor loading of $|.44|$ or greater, with a difference between each retained item's two

largest pattern coefficients $\geq .22$. The 2-factor solution accounted for 49.97% of the total variance in the measure development sub-sample. Item content and factor loadings from for the 2-factor EFA are presented in Table 5.

Coping with Unemployment Self-Efficacy Scale

The new Self-Efficacy for Psychological Coping with Unemployment scale (PCUE-SE) was subjected to a Kaiser-Meyer-Olkin (KMO) test of sampling adequacy, producing a value of .93 and a significant Bartlett's test of sphericity ($p < .001$), supporting the factorability of the scale. As with the CUES scale, the principal-axis method of factor extraction with oblimin rotation was chosen. Eigenvalue, scree plot, parallel analysis, and factor interpretability criteria were used to determine factor structure. Though the initial evidence offered some support for a 2-factor structure, a one-factor solution was deemed most plausible based on several criteria (e.g., scree, parallel analysis, interpretability). After item elimination (e.g., due to cross-loads), 11 items were retained that loaded .56 or greater on a single factor, which accounted for 49.87% of the total variance. Item content and factor loadings are presented in Table 6.

Reliability and Validity Estimation

Descriptive statistics for the retained measures in the measurement development sub-sample are presented in Table 7. Internal consistency reliability coefficients were found to be adequate for all scales (range of .80 to .96), including the two coping behavior scales (CUES-PC, .88; CUES-JSC, .87), and the new self-efficacy scale (PCUE-SE, .91). With the exception of slight skew and/or kurtosis on

proactive personality, financial strain, and psychological distress, most scale scores were distributed normally.

The correlations among the predictor, dependent, and validity estimation variables are presented in Table 8. The psychological coping self-efficacy scale (PCUE-SE) was found to correlate significantly and substantially with both Job Search Self Efficacy (JSSE-B), $r = .66$, and Proactive Personality, $r = .56$. It was expected that those with greater self-efficacy at coping with the psychological challenges of unemployment would express confidence at performing job search activities and would also see themselves as generally adept at performing proactive behaviors. Despite these large correlations, the PCUE-SE accounted for significant variation in well-being and distress after controlling for proactive personality and job search self-efficacy, suggesting that it represents a distinctly useful predictor (see regression results in Tables 3 and 4). The PCUE-SE also related substantially with the psychological coping behavior scale (CUES-PC), $r = .64$. This correlation is consistent with social cognitive theory assumptions that people are more likely to perform behaviors at which they feel efficacious.

Social support was moderately related to psychological coping behavior ($r = .33$) and coping efficacy ($r = .42$), which is also consistent with theoretical assumptions. Financial strain, conceptualized as a coping barrier, was negatively related to psychological coping behavior ($r = -.20$) and coping efficacy ($r = -.35$). These correlations suggest that financial strain is associated with somewhat lesser engagement in psychological coping and lower confidence in one's coping capabilities, perhaps because financial strain may tax one's psychological resources.

Confirmatory Factor Analysis

CFA was next performed to assess the replicability of the factor structures of the psychological coping behaviors and self-efficacy measures. These analyses used the structural equation modeling and maximum likelihood estimation procedures of Mplus 8.6 (Muthén & Muthén, 1998-2019) and the 406 respondents employed in the study's hypothesis testing phase. Model-data fit was determined using the two-fit criterion recommended by Hu and Bentler (1999), with good fit indicated by (a) standardized root mean square residual (SRMR) values $\leq .08$ and (b) root mean square error of approximation (RMSEA) values $\leq .06$ or comparative fit index (CFI) values $\geq .95$.

For the Coping with Unemployment Scales (CUES) measure, which contains two factors, reflecting psychological coping behaviors and job search coping behaviors, the model fit indices suggested adequate, though not ideal, fit to the data: Satorra-Bentler (S-B) χ^2 (89, $N=406$) = 257.66, $p < .001$; SRMR = .07; RMSEA = .07, 90% CI [.059, .078]; CFI = .93. Items loaded highly (.55 - .84) and significantly on their expected factors, and the two factors produced a latent correlation of .54; see Table 9 for CUES CFA factor loadings. For the Self-Efficacy for Psychological Coping with Unemployment (PCUE-SE) scale, the model fit the data well: S-B χ^2 (44, $N=406$) = 116.32, $p < .001$; SRMR = .04; RMSEA = .06, 90% CI [.050, .078]; CFI = .96. Items loaded highly (.54 - .79) and significantly on the single factor; see Table 10 for the PCUE-SE CFA factor loadings.

Measurement Model Test

A measurement model that represented the social cognitive predictors (psychological coping behaviors, self-efficacy for psychological coping, social support, proactive personality, and financial strain) and outcomes (well-being and psychological distress) as seven correlated factors was next tested. Each variable was modeled with three observed indicators, thereby reducing the parameter to sample size ratio. Psychological distress was represented by its three subscales: anxiety, depression, and distress. The other variables were represented by item parcels using Little et al.'s (2013) balancing method. The fit indices for the model test suggested good fit to the data: S-B χ^2 (168, $N=406$) = 366.75, $p < .001$; SRMR = .04; RMSEA = .05, 90% CI [.046, .062]; CFI = .97. Observed indicators loaded highly (.83 - .93) on their expected factors; see Table 11. Observed variable correlations and latent variable correlations (presented in Tables 12 and 13) show that the model variables are all significantly correlated with each other, with the exception of the observed variable correlation between proactive personality and financial strain. Means, standard deviations, coefficient alphas, skewness, and kurtosis for observed variables in the hypothesis testing sub-sample are shown in Table 14. The alpha coefficients ranged from $\alpha = .90$ to .96, which is similar to the measure development sample.

Structural Model Analyses

The model fit indices for the structural model suggested good fit to the data: S-B χ^2 (170, $N=406$) = 367.76, $p < .001$; SRMR = .04; RMSEA = .05, 90% CI [.046, .061]; CFI = .97, consistent with hypothesis 8. Structural coefficients are presented in Figure 3. The structural coefficients were mostly consistent with the SCCT CSM

model and in the expected directions (with exceptions noted below). Specifically, well-being was predicted by psychological coping behaviors (.23), psychological coping self-efficacy (.57), and financial strain (-.13), though not by social support (.04); these predictors accounted for 68% of the variance in well-being (consistent with hypothesis 6a).

Similarly, psychological distress was predicted by psychological coping self-efficacy (-.36) and financial strain (.58); it was also predicted by psychological coping behaviors (.24), though not in the expected direction. The latter finding was likely due to statistical suppression since the observed variable correlation between psychological coping and psychological distress was, as expected, negative in both the measure development and hypothesis testing samples. Additionally, social support (.04) did not produce a significant path to psychological distress. Together, the predictors accounted for 47% of the variance in psychological distress (consistent with hypothesis 6b).

Psychological coping behaviors were predicted by psychological coping self-efficacy (.57), proactive personality (.15), and social support (.17), but not by financial strain (.07); together, these predictors accounted for 58% of the variance in psychological coping behaviors. Psychological coping self-efficacy was also substantially predicted by proactive personality (.53), social support (.24), and financial strain (-.24). These predictors accounted for 56% of the variance in psychological coping self-efficacy. The covariance between proactive personality and social support was significant (.43), as were the covariances between proactive personality and financial strain (-.11) and between social support and financial strain

(-.31). The covariance between the two dependent variables, well-being and psychological distress (-.18), was also significant.

Aligning the structural path coefficients with their respective hypotheses: for hypothesis 1, the results reported above are consistent with both hypotheses 1a and 1b (i.e., the paths from proactive personality to psychological coping self-efficacy and psychological coping behaviors were found to be positive and significant). In terms of hypothesis 2, the results are consistent with hypotheses 2a and 2b (the paths from social support to psychological coping self-efficacy and psychological coping behaviors were found to be positive and significant). However, hypotheses 2c and 2d were not supported because the paths from social support to well-being and psychological distress were not significant.

The results supported most of hypothesis 3; specifically, support was found for 3a, 3c, and 3d (the paths from financial strain to psychological coping self-efficacy, well-being, and psychological distress were all significant and in the expected directions); however, 3b did not receive support (the path from financial strain to psychological coping behaviors was not significant). All of the paths specified in hypothesis 4 were found to be significant and in the expected directions (the paths from psychological coping self-efficacy to psychological coping behaviors, well-being, and psychological distress). Additionally, of the two paths specified in hypothesis 5, 5a was supported (the path from psychological coping behaviors to well-being), but 5b was not (the path from psychological coping behaviors to psychological distress was significant, but not in the expected direction).

The results are also consistent with hypotheses 6a and 6b, namely, that the set of social cognitive predictors collectively explained a significant amount of variation in well-being and psychological distress. However, as noted above, not every predictor with a direct path to well-being and psychological distress accounted for unique variation (hypothesis 7). Support was found for hypothesis 8 which had posited that the path model would provide adequate fit to the data.

Finally, an alternative structural model test was run. Specifically, as in other recent CSM model studies (coping with unemployment, Lent et al., 2022; proactive career behavior, Lent et al., in press), a model variation was tested in which proactive personality predicted the outcome variables both directly and indirectly. This contrasts with the target model, which posited only indirect links from proactive personality to well-being and psychological distress. The alternative model fit yielded good fit to the data: S-B χ^2 (168, $N=406$) = 366.75, $p < .001$; SRMR = .04; RMSEA = .05, 90% CI [.046, .062]; CFI = .97. However, the two added paths were not significant, and this model fit did not improve significantly upon the fit of the indirect effect only (target) model (Δ S-B χ^2 = .76 [2], $p = .68$). Thus, the target model may provide a more parsimonious conception of the relationships among the variables.

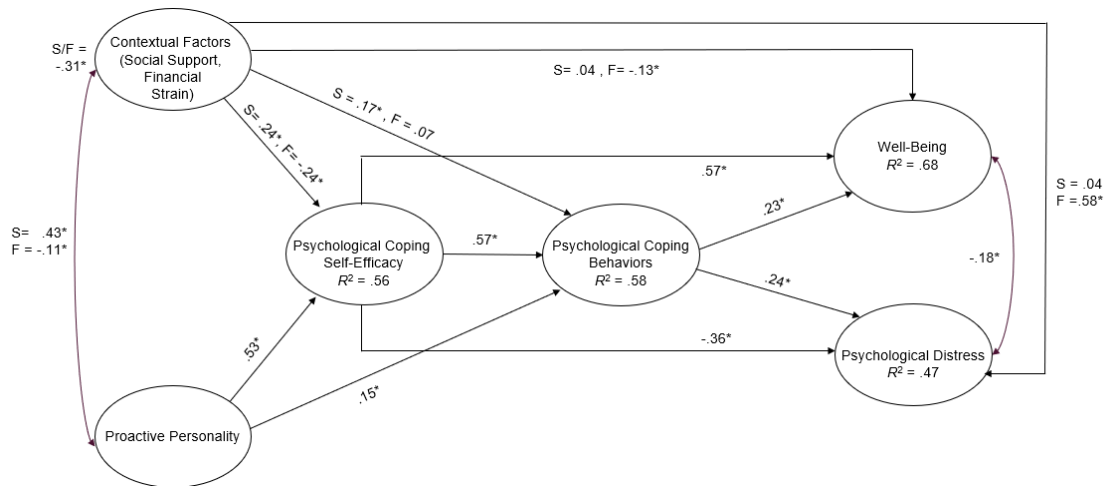


Figure 3. Structural Coefficients in the Career Self-Management Model of Coping with Unemployment. *Note.* S = social support, F = financial strain. F/S = covariance between social support and financial strain. $*p < .05$.

Discussion

This study was aimed at examining the social cognitive, personality, and contextual variables that may help explain how people cope, more or less successfully, with the psychological challenges of unemployment. As part of this examination, two measures were either revised (the CUES, a set of unemployment coping behaviors) or developed (the PCUE-SE, a companion measure of unemployment coping self-efficacy). The psychometric features of these measures were first explored in a measure validation phase before the measures were used to test hypotheses derived from the SCCT career self-management model.

Summary of Major Findings

Efforts were made to enhance the factor structure and predictive utility of the items used to represent financial coping behavior. On the one hand, these efforts did

yield a distinctive coping factor on the CUES measure in the first sub-sample of participants. On the other hand, the financial coping factor produced a disappointing internal consistency reliability estimate. Moreover, this factor did not account for unique predictive variance in the two dependent variables, well-being and psychological distress, after controlling for the sets of contextual, personality, job search coping, and psychological coping variables. Furthermore, financial coping did not moderate the relationship between financial strain and the dependent variables. The set of psychological coping variables (assessed with the CUES-PC, PCUE-SE, and MSPSS) did, however, explain unique variance in the dependent variables (7% of the unique variation in well-being and 5% of the unique variation in psychological distress) beyond the other predictors. The CUES-PC and PCUE-SE also produced clear factor structures and adequate reliability and validity estimates in the measure development phase. Their factor structures were also found to be stable, based on a CFA with the second sub-sample.

The full set of psychological coping variables was next subjected to a measurement model test. Support was found for a 7-factor measurement model, with item parcels loading substantially on their corresponding factors, and latent variable correlations ranging from $-.11$ to $.80$. A test of the target structural model also provided good fit to the data and offered support for most of the hypothesized paths among the variables. An alternative structural model was tested that added direct paths from proactive personality to the dependent variables. It did not, however, improve significantly on the fit of the target model or produce significant direct paths from proactive personality to the dependent variables. The target model was,

therefore, considered the more parsimonious account of the relations among the theoretical variables.

Implications for the Utility of the New Measures

The findings suggest that the CUES coping measure and the PCUE-SE self-efficacy measure may be useful in future research on how unemployed people cope with the challenges of being out of work. The findings regarding the CUES replicated earlier findings by Lent et al. (2022) that the CUES reflects distinct but related factors reflecting unemployment coping by engaging in (a) job finding behaviors and (b) psychological coping (e.g., time structuring and emotional regulation) behaviors, apart from job finding. The focus on psychological coping behavior may be particularly important during economic situations, such as major recessions or much of the COVID-19 pandemic, when unemployment rates made it difficult to bounce back quickly by finding new work. The CUES and PCUE-SE measure set can be utilized in future studies to represent a reasonably comprehensive and updated set of unemployment coping measures, offering an efficient alternative to measures that were developed over 30 years ago by Leana and Feldman (1990) and Kinicki and Latack (1990).

The current findings shed less light on the role and utility of financial coping as a distinct aid to psychological functioning during unemployment. Though financial coping did not contribute uniquely to the prediction of the psychological outcome variables, it was found, similar to Lent et al.'s (2022) results, that financial stress remained a significant predictor of these outcomes, especially psychological distress. The nature of this link deserves further exploration. One possibility is that the process

of managing one's finances, particularly when one does not have much or any income, is simply more distressing than relieving, and thus while financial strain does impact mental health negatively, financial management strategies may not necessarily ameliorate this effect. For example, changing one's lifestyle to accommodate lack of income is a reasonable solution to diminished finances, but it may do relatively little to improve one's morale, and may actually harm it.

According to Jahoda's (1981) separation of the benefits of working into manifest and latent categories, psychological coping strategies (e.g., social, emotional, and temporal coping behaviors) can be viewed as behaviors that attempt to replace or to deal with the loss of the latent benefits of work, such as structured time, enforced activity, and valued social relationships. Financial management coping strategies, such as budgeting, may simply be insufficient to replace or deal with the loss of one's income, the manifest benefit of working. Instead, a more impactful strategy for dealing with this loss, and the financial stress it creates, may be either to regain employment as quickly as possible – which is not fully under volitional control – or for the government to create stronger societal safety net protections (e.g., extended unemployment benefits). In sum, it seems clear that financial factors are important to the mental health of unemployed people, but the role of financial coping behaviors per se remains unclear.

The new self-efficacy for psychological coping with unemployment (PCUE-SE) scale produced a simpler, somewhat different factor structure than did the CUES psychological coping behavior sub-scale. In particular, items reflecting confidence at coping with financial as well as social, emotional, and temporal aspects of

unemployment all loaded on a common factor. One possible explanation is that believing in one's ability to manage one's finances is an important part of bolstering one's morale, and thus improving well-being and lessening distress. By contrast, the psychological benefits of actually managing one's finances may be neutralized by the growing reality of how difficult it can be to replace or mitigate the loss of income. Moreover, financial help-seeking may engender a sense of embarrassment or failure in many persons.

In terms of validity, the PCUE-SE scale correlated strongly with job search self-efficacy and proactive personality, suggesting that it overlaps with, or is perhaps informed by, how well people feel that they can perform job search tasks or deal with other life challenges. However, it was notable that the PCUE-SE still accounted for significant variation in psychological distress and well-being even after controlling for job search self-efficacy and proactive personality, suggesting its unique predictive validity. In other words, while those who have a strong sense of efficacy for psychological coping with unemployment also tend to feel efficacious at the job search process and to display proactive dispositions, it may nevertheless represent a distinctly beneficial coping resource. Moreover, the PCUE-SE scale is unique in the unemployment coping literature in its focus on psychological coping self-efficacy, thus contributing a new measure that can be utilized by future researchers.

Implications for Understanding and Facilitating Psychological Coping with Unemployment

The structural path analysis suggested that the CSM model provides good overall fit to the data, though some individual path hypotheses were not supported.

Overall, as expected, well-being was significantly and positively predicted by psychological coping behaviors and self-efficacy, and negatively predicted by financial strain. Thus, unemployed persons reported greater well-being when they engaged actively in psychological coping behaviors, felt efficacious at doing so, and experienced lower levels of financial strain. Psychological distress was also predicted by these three variables. In particular, lower levels of distress were associated with lesser financial strain and greater coping self-efficacy. Paradoxically, higher amounts of coping behavior were associated with more, rather than less, distress. The most parsimonious explanation for this finding may be multicollinearity (i.e., statistical anomaly), in particular, the very strong relationship between self-efficacy and coping behavior, which affected the nature of the latter variable's unique contribution to the predictive equation. Parenthetically, it is quite possible that greater distress could prompt greater use of coping behavior (i.e., there could be a positive relationship between the two variables), but longitudinal research is needed to examine the precise nature of the (possibly bidirectional) relationship between the two variables over time. For example, more distress may well lead to greater coping behavior which, in turn, lessens distress.

Interestingly, neither of the dependent variables was directly predicted by either social support or proactive personality. Rather, both of these predictors played more indirect than direct roles in the model. In particular, persons with higher levels of social support and proactive traits reported higher coping self-efficacy and greater tendencies to engage in psychological coping behaviors which, in turn, were linked to the coping outcome variables. They may, thus, suggest beneficial ways of promoting

coping behavior and self-efficacy – for example, by providing social-emotional support in the context of unemployment, offering exposure to others who are coping successfully with unemployment, and providing explicit training in time management, emotional regulation, and social coping behaviors.

Given the strong, direct path of financial strain to psychological distress in particular, further research is needed on how to blunt its role during unemployment. Coping efficacy may offer part of the answer. Feeling that one has the ability to cope with unemployment well may boost the morale needed to manage the emotional challenges of long-term job loss. Coping efficacy may also affect how people appraise stressors. That is, those who possess greater coping resources, such as self-efficacy, may appraise stressors as less threatening than do those who perceive that they have access to fewer coping resources (Latack et al., 1995; Lazarus & Folkman, 1984). However, coping efficacy may not be sufficient to offset higher levels of financial strain; in fact, coping efficacy and financial strain were negatively related, suggesting that unemployed persons only have a finite amount of psychological resources, such that greater financial strain can stress one's psychological resources to the point of diminished confidence in one's coping abilities. More direct financial resources and strategies, such as engaging in part-time or gig work, may be necessary to deal with immediate and compelling financial stressors, ideally lessening their impact on psychological distress.

Much of the unemployment coping literature focuses exclusively on job search coping. This may be due in part to the evidence indicating that job search coping does offer an effective route toward re-employment, whereas evidence

regarding the linkages of emotional coping to mental health in the context of unemployment has been weak (Lin & Leung, 2010; McKee-Ryan et al., 2005). Yet the literature on the effects of emotional coping with unemployment may have been limited by the use of incomplete and flawed measures of non-job search coping behaviors. The hierarchical regressions in the measure development phase of this study suggest that psychological coping variables (and the novel measures used to assess them) may, in fact, predict mental health outcomes, above and beyond job search coping variables. In the model testing phase of the study, the social cognitive model accounted for large portions of the variance in the well-being and distress outcomes as well as in their coping behavior and self-efficacy predictors. Thus, both the new measures and the CSM model warrant further study in the effort to better understand how people cope with the psychological challenges of unemployment.

Finally, in addition to the suggestions offered above about provision of social support and efficacy-building in the context of unemployment interventions, the present findings highlight the need for career counselors, employment agencies, and other help-providers to be attuned to the psychological challenges faced by the unemployed. Simply put, while it may be tempting to focus only on reemployment strategies, it may also be important to help clients cope with the negative psychological impact caused or exacerbated by ongoing unemployment. This focus on mental health is particularly important during periods where a significant portion of unemployed people may have trouble finding re-employment quickly. Psychological coping strategies, and the sense of efficacy that facilitates their use, have the potential to alleviate unnecessary suffering even when it is not possible to

hasten re-employment. The career self-management framing of this study also highlights the value of helping workers to consider the potential or actual loss of a job as a normative career setback, one of a multitude of career events that call for preparedness and adaptive skills (Lent & Brown, 2013).

Limitations and Directions for Future Research

The study's limitations have a number of implications for future research applying the CSM model to coping with unemployment. First, the model test employed a novel measure of psychological coping self-efficacy and a revised measure of psychological coping. Model testing had been preceded by examination of the measures' psychometric properties, including their factor structure. Still, research is needed to further estimate their reliability and validity, and to test the stability of their factor structures, in independent samples of unemployed workers. In addition, subsequent studies can use these measures to examine the extent to which coping effectively with the psychological challenges of unemployment facilitates the job search and reemployment process – and conversely, the degree to which success at job finding promotes recovery of psychological functioning.

Second, given the limitations of the measure used to assess financial management coping behaviors, further research and analyses are needed to explore additional ways in which unemployed persons cope with financial strain, and the degree to which such financial coping either promotes, hinders, or moderates psychological outcomes. This and an earlier study (Lent et al., 2022) documented the linkage of financial strain to well-being and distress, though they did not fully illuminate what people can do on their own to neutralize this strain. It may be that

individuals possess only limited agency to compensate for economic losses and that some efforts to cope with these losses (e.g., asking family members for loans) achieve short-term financial benefits at the expense of one's emotional functioning.

Of course, accumulated economic resources and financial support systems, such as household income or savings, may also play extremely important roles in how people are able to cope with the financial strain of unemployment. These observations suggest myriad directions for examining the ways in which financial coping and economic coping resources may mediate or moderate the relation of financial strain to psychological functioning amidst unemployment. Also needed are international studies that examine how the level of unemployment benefits that a country provides may affect perceived financial strain, coping behaviors, and psychological outcomes. Furthermore, additional analyses might look at the possible moderating effect of individual difference variables, such as gender, on the relation of financial strain to psychological outcomes.

A third limitation is that this study employed a cross-sectional design, whereas SCCT models imply causal relationships (Lent et al., 1994). A cross-sectional design was deemed reasonable given the study's measure development and initial model testing objectives, which may provide a foundation for subsequent longitudinal and experimental studies. Still, the cross-sectional design precludes inferences regarding causality or temporal predominance. Fourth, the study relied exclusively on self-report measures. To determine the extent to which common method variance was an issue, Harman's single factor test was run (Podsakoff & Organ, 1986). The results did not produce a single factor that accounted for > 50% of the variance in the unrotated

factor solution. In fact, the largest factor explained 27.82% of the variance, suggesting that the observed relations among the variables are not simply due to common method variance. However, the cross-sectional design and the mono-source and mono-method measurement procedures did likely produce inflated parameter estimates in the model test.

Fifth, this study focused on a subset of the variables in the CSM model, omitting such variables as outcome expectations, learning experiences, background contextual affordances, and additional person inputs. While these omissions enabled study of the model's core social cognitive predictors, the absence of learning experiences, in particular, did not allow for exploration of elements that inform coping efficacy and behavior. Such elements (e.g., modeling, prior unemployment coping experiences) may have important implications for the design of unemployment interventions and therefore deserve study in future model tests.

A final caveat is that this study was conducted in the spring of 2022, during a period of job recovery and growth following the large-scale economic and social disruptions caused by the COVID pandemic. The start of the COVID pandemic resulted in unprecedented job losses, peaking in spring 2020, followed by a period of recovery that has resulted in an unemployment rate that is at a post-pandemic low and is described by economists as nearing full employment, a condition where all workers who are available and looking for a job can find one, as of this writing (Federal Reserve; U.S. Bureau of Labor Statistics, 2022). Another noteworthy recent economic is the record high job resignation rate that started in 2021 (often referred to as the Great Resignation), a phenomenon attributed to workers re-thinking their career goals

and dissatisfaction with their pay, among other reasons (Parker & Horowitz, 2022). Also of note is that this study took place in a period when individual household savings were at a historic high, in part due to earlier COVID-specific government stimulus and unemployment benefits as well as suppressed spending during the pandemic. A counteracting force, however, has been historically high inflation rates, which have reached levels not seen in decades (Washington Post, 2022).

This unique historic context may have affected the findings in a variety of ways. For example, those unemployed for months on end during the pandemic may have experienced conditions, such as social isolation or family conflict, that contributed to their psychological distress beyond the effects of unemployment alone. Conversely, recently improving economic conditions, especially increased job openings and a temporarily buttressed financial safety net, may have contributed to optimism regarding reemployment (and, thus, improved well-being). It is also difficult to speculate on how economic and social trends, such as the Great Resignation, may have affected the nature of the sample for this study, and, hence, the findings. Given such contextual anomalies, the CSM model test should be replicated and extended under more varied, including relatively stable, economic and unemployment scenarios.

Extended Literature Review

Work fulfills many purposes in people's lives, from providing the income to meet basic needs, to helping create and express a sense of self and group identity, to allowing one to contribute to society (Lent & Brown, 2021). Considering the many important roles that work plays, what happens when people undergo an involuntary job loss? The research clearly shows that unemployment is closely linked to negative mental and physical health outcomes; furthermore, longitudinal studies provide evidence that it is unemployment that causes these negative outcomes (e.g. McKee-Ryan et al., 2005; Paul & Moser, 2009). However, there is also evidence that the coping strategies that one brings to the situation can make a significant difference in terms of the degree to which unemployment negatively affects workers' health, general well-being, and re-employment outcomes (e.g. Kanfer et al., 2001; Solove et al., 2015).

This extended review will begin by defining relevant terms in the literature and then review the effects of unemployment and subsequent-re-employment on well-being by considering mediating and moderating factors that, respectively, help to explain or affect the relationship between unemployment and well-being. Subsequently, unemployment and coping will be examined in more detail – specifically, the relationship between unemployment coping strategies and re-employment outcomes, and a review of coping resources. Finally, an examination of the theoretical models of unemployment coping will be presented, along with how existing unemployment coping research fits into the CSM model (Lent & Brown, 2013).

Defining Displacement, Job Loss, and Unemployment

The terms job displacement, job loss, and unemployment are sometimes used interchangeably in the literature, but it is important to consider their distinctions because studies have shown that mental health and other outcomes can differ by type of unemployment. **Job displacement** typically refers to involuntary unemployment that results from organizational decisions (e.g. outsourcing, reorganizing, downsizing, going out of business, layoffs), often related to larger economic forces (e.g. economic recessions, technological advancements, and structural changes in an industry) (Quintini & Venn, 2013). **Job loss** is a broader term, which typically refers to the removal of workers from their jobs involuntarily. Unlike job displacement, a job loss can refer to workers being fired for individual reasons or workers being pressured to quit, in addition to workers being let go because of their employers' operating decisions (Latack et al., 1995). However, job loss as a term does not typically apply to workers who voluntarily quit for personal reasons (Gowan, 2014).

In most cases, job loss leads to a period of unemployment (absent immediate re-employment), but the unemployed are a broader category of people than just those who have undergone an involuntary job loss. Colloquially, being unemployed can refer to any person currently without a job, but the official definition of being **unemployed**, according to the U.S. Bureau of Labor Statistics (2022), is someone who is jobless, is available to be hired, and has actively looked for work in the past four weeks. Apart from the employed and the unemployed, those remaining are not considered to be a part of the national labor force; these include persons who are not of working age, who are going to school full-time, who are retired, who are full-time

parents, who are underemployed, or who are discouraged workers and no longer looking for work (U.S. Bureau of Labor Statistics, 2022).

An additional way to differentiate the concepts of job loss and unemployment is in terms of duration. That is, a job loss is considered an event, whereas unemployment is considered a state or condition, with the former event leading to the latter state, absent immediate re-employment (Gowan, 2014; Latack et al., 1995). Both terms are found in the literature, with some studies choosing to use the term “job loss” to highlight the impact of and adjustment to such a life event, and other studies using the term “unemployment” to highlight the state of being unemployed over a period of time that can vary widely from the short-term to the chronic long-term (Latack et al., 1995). In the U.S., ***short-term unemployment*** is defined as being unemployed for less than 27 weeks (approximately six months); being unemployed for 27 weeks or longer is referred to as ***long-term unemployment*** (U.S. Bureau of Labor Statistics, 2022).

The proposed study will primarily involve ***unemployment following an involuntary job loss***. However, in this review, there will be some focus on the broader category of the unemployed because the reasons for unemployment (e.g. being displaced or laid off, being fired, being furloughed indefinitely, or quitting) are not always clear in the literature. This is particularly true of studies that draw from government unemployment data, which do not distinguish between the unemployed who were displaced and the unemployed who were fired (U.S. Bureau of Labor Statistics, 2022). However, it is generally true that research on unemployment does not focus on those who are fired (i.e., terminated for cause), but primarily focuses on

the displaced (i.e., those terminated for reasons other than unsatisfactory work performance) (Hanisch, 1999).

The Effects of Unemployment and Re-Employment on Well-Being

As detailed in the introduction, the meta-analysis conducted by McKee-Ryan et al. (2005) examined over 100 studies looking at the effects of unemployment on well-being; they found decreased psychological and physical health among those who are unemployed compared to those who are employed in their cross-sectional studies analysis. Moreover, in their longitudinal studies analysis, they found that unemployment is associated with decreased mental health, whereas re-employment is associated with increased psychological well-being, physical well-being, and life satisfaction. Paul and Moser's (2009) meta-analysis examined over 300 studies looking just at the effects of unemployment on mental health, producing similar results to McKee-Ryan et al. (2005), not only finding that unemployed individuals have greater mental health distress than employed individuals in their cross-sectional studies analysis, but that mental health worsens for those who become unemployed and improves for unemployed individuals who find new jobs in their longitudinal studies analysis.

Mediating Factors

As summarized above, the well-being of those who are involuntarily unemployed has been well studied and is arguably the outcome of primary importance for counseling psychology. However, unemployment also has economic and social effects that are important to understand, in part, due to their mediating role

in the relationship between involuntary unemployment and decreased well-being. The direct negative social outcomes of job loss include an increase in perceived social exclusion, a decrease in social support, and a decrease in social interactions (McKee-Ryan, 2005; Pohlen, 2019). Sense of belonging, social interactions, and social support are important because they serve as a buffer for stress and help mitigate depression, both important components of psychological distress that can be considerable during unemployment (McKee-Ryan, 2005; McKee-Ryan & Kinicki, 2002).

A discussion of the outcomes of an involuntary job loss would be incomplete without examining the effects of the concomitant loss of one's income. Studies suggest that it is the financial strain and distress typically caused by the loss of income that mediates the relationship between loss of income and consequent negative psychological and physiological health effects (Huijts, 2015; Leana & Feldman, 1990). Looking at financial strain more closely, it is positively associated with depression, anxiety, emotional distress, and a lower sense of well-being (McKee-Ryan & Kinicki, 2002). Furthermore, negative social outcomes are associated with financial strain; specifically, it predicts greater depression in one's partner, lower relationship satisfaction, worsening parent-child relations, and increased interpersonal and academic problems in one's children (Ortiz & Farrell, 1993; Perrucci, 1994; Vinokur et al., 1996). The impact of financial strain after a job loss is particularly notable because even for those who become re-employed, mean post-displacement earnings the year after re-employment are approximately 10% less than prior to job loss; even after four years, displaced workers earn approximately 6% less on average than they did prior to their job loss (Quintini & Venn, 2013).

Moderating Factors

It is also important to consider moderating factors that affect the strength or direction of relations between predictor and dependent variables. In particular, findings indicate that the simple act of re-employment may not be enough to ensure better mental health outcomes. This may, in fact, depend on the quality of re-employment, including whether one is underemployed, and thus experiencing relative deprivation in the new job compared to the previous job (Feldman et al., 2002; Kinicki et al., 2000).

Waters (2007) examined how re-employment outcomes may also depend on the original cause of the previous unemployment, looking at workers who were displaced versus workers who voluntarily took a job redundancy. In other words, when a work organization needs to cut its workforce, they can either let workers go involuntarily, or ask for volunteers to leave (often offering an incentive in the latter case). Note that in the following descriptions of effect sizes, η^2 of .01, .06, and .14 are considered, respectively, small, medium and large effects. Waters (2007) found that once re-employed, there was a medium effect-size for re-employment quality, such that those whose previous unemployment had been the result of involuntary displacement rated their re-employment quality lower ($\eta^2 = .09$). Moreover, there were large effect sizes for depression and job insecurity once re-employed, such that those who had been previously involuntarily displaced rated their job insecurity higher ($\eta^2 = .26$) and reported higher depression ($\eta^2 = .46$) than those whose previous unemployment had been voluntary (i.e., they had voluntarily taken a job redundancy).

Other studies have added additional nuance to our understanding of how involuntary unemployment affects well-being. McKee-Ryan et al.'s (2005) meta-analysis found that neither the year of data collection nor the national unemployment rate significantly affected the association between being unemployed and well-being; the same was true of the level of unemployment benefits offered. However, they found that for those who were long-term unemployed, unemployment had greater negative effects on mental health than for those who were short-term unemployed ($d = -0.97$ and -0.43 , respectively). Paul and Moser (2009) likewise reported that “the longer persons were unemployed, the more pronounced were the negative effects of unemployment on mental health ($\beta = .13, p < .05$)” (p. 273).

Looking at demographic and status variables, Berchick et al. (2012) found that being of a higher socioeconomic status (SES) does not moderate the relationship between involuntary job loss and level of depression per se. However, when they looked at the elements of SES separately, they found that while having greater financial assets does not moderate this relationship, higher education levels and lower occupational prestige do provide a buffer for mental health when workers lose their jobs. Gender has also emerged as a significant moderator such that the association of unemployment with negative mental health was weaker for females than males ($\beta = -.20$); occupational status was similarly a moderator, such that the association of unemployment and psychological distress was stronger for blue-collar workers than white-collar workers ($\beta = .19$). However, there was either no evidence or marginal evidence for one's racial/ethnic identity or marital status being a moderator (Paul & Moser, 2009).

McKee-Ryan et al. (2005) found that those who were unemployed due to just graduating from high school had significantly lower well-being than adults who were unemployed for other reasons ($d = 0.82$ and 0.53 , respectively). However, Paul and Moser's (2009) meta-analysis found that age was not a significant moderator of the association between unemployment and mental health. Relatedly, Gallo et al. (2006) looked at recurrent involuntary job loss in older workers (ages 50 and up). They found that two involuntary job losses resulted in a modest, but not significant increase in level of depression compared to those who had only one job loss. Three such job losses resulted in decreased depressive symptoms, suggesting that for those nearing retirement, repeated involuntary job losses were associated with successively less severe impacts on mental health. In sum, though there is clear evidence of unemployment being associated with negative well-being and re-employment with positive well-being, these relationships can be quite complex and can be affected by factors such as one's demographics or the nature of one's unemployment.

Unemployment and Coping

Coping with unemployment is posited to be domain-specific, and much research has been conducted in this domain, providing evidence that unemployment coping strategies can be significantly associated with the well-being of the unemployed (Latack et al., 1995; McKee-Ryan et al., 2005; Solove et al., 2015). Much of the research on unemployment coping has categorized coping into two types: problem-focused and emotion-focused. Perhaps not surprisingly, problem-focused coping is highly intercorrelated with emotion-focused coping. Leana et al. (1998) reported that the two general categories were strongly correlated, and they also

provided correlations between different types of emotion-focused coping and different types of problem-focused coping ranging from $r = .57$ to $.78$. However, the same study reported that types of problem-focused coping were more strongly intercorrelated with each other than with emotion-focused coping; the same was true of the types of emotion-focused coping (i.e. they were more strongly intercorrelated with each other than with problem-focused coping). Thus, Leana et al.'s (1998) findings suggest that people are highly likely to use sub-types of the same coping strategy type together, but also that it might be important to distinguish between those who use a variety of coping strategies and those who do not use any at all. The findings related to these strategies, however, must be interpreted cautiously because of the way that coping with job loss has been operationalized and measured.

Looking chronologically at the evolution of research on unemployment and coping, a rough timeline shows that early studies in this domain sought to describe stress appraisal processes, coping processes, and the effects of involuntary job loss on the individual (e.g. Kinicki & Latack, 1990; Leana & Feldman, 1990; Warr et al., 1988); this progressed to the development and testing of theories and models, which often included variables related to stress appraisal and elements of coping (e.g., coping strategies, coping resources; Gowan & Gatewood, 1997; Latack et al., 1995). Next came a focus on the outcomes of job loss coping, such as the psychological, physical, social, economic, and re-employment effects (e.g. McKee-Ryan et al., 2005; Paul & Moser, 2009). Current research is looking at the importance of coping with involuntary unemployment in the context of one's career adaptability, transitions, and self-management (e.g. Koen et al., 2010; Thompson et al., 2017).

Coping Strategies and Well-Being Outcomes

The relationship between unemployment coping strategies and well-being outcomes is less well studied than the relationship between unemployment coping strategies and re-employment outcomes. A review of the literature shows that both McKee-Ryan et al. (2005) and Lin and Leung (2010) have found a small correlation between emotion-focused coping and well-being in the context of unemployment. Also of note is that job search effort, a coping strategy necessary for re-employment, has been associated with worse mental health (Lin & Leung, 2010; McKee-Ryan et al., 2005), illustrating how the relationship between coping and well-being is not always directly obvious.

Coping Strategies and Re-Employment Outcomes

A number of studies have focused on how coping strategies relate to relevant outcomes, with the primary focus being on the effect of problem-focused coping on re-employment outcomes. Solove et al. (2015) found that problem-focused coping predicts re-employment; this is supported by reviews of earlier studies such as Kanfer et al.'s (2001) meta-analysis, which found that job search behaviors had a small-sized, positive correlation with re-employment status ($r = .21$) and number of job offers ($r = .28$); they also found a weak, negative association between job search behaviors and unemployment duration ($r = -.14$). While these findings are widely cited, it should be noted that there are exceptions. For example, Gowan et al. (1999) and Leana and Feldman (1990) found no relationship between problem-focused coping and re-employment.

The relationship between emotion-focused coping and re-employment has not been studied as extensively as problem-focused coping, in part because of the theory and findings in the general coping literature that problem-focused coping is more effective and is associated with better psychological health outcomes; moreover, among the studies that do address emotion-focused coping, the findings are more complicated (Solove et al, 2015; Wanberg, 1997). Along with Solove et al. (2015), Leana and Feldman (1990) found no relationship between emotion-focused coping and re-employment. However, Gowan et al. (1999) found that distancing, a type of emotion-focused coping, was related to re-employment after six months. Leana and Feldman (1995) reported a positive relationship between emotion-focused coping and re-employment. These authors also found that the unsatisfactorily re-employed had engaged in more problem-focused and emotion-focused coping than the satisfactorily employed. Kinicki et al. (2000) found that problem-focused coping behaviors were unrelated to the quality of re-employment, but that emotion-focused coping was negatively related to the quality of re-employment. The basis for the mixed findings is unclear but may have been partly due to the use of flawed or incomplete measures of emotion-focused coping.

Personal and Social Coping Resources

The context in which one chooses and deploys coping strategies includes the coping resources that one possesses. As summarized in more detail in the introduction, four major categories of coping resources are examined in McKee-Ryan et al.'s (2005) meta-analysis: personal, social, time structure, and financial.

Possessing these coping resources were associated with better mental health in the unemployed.

Other studies have defined coping resources differently, looking at concepts such as job search motivation, job search self-efficacy, psychological resources, and mastery (Vinokur & Schul, 2002). Kanfer et al.'s (2001) meta-analysis considered job searching as a self-regulatory process and examined contextual and trait variables that relate to job search behavior. Their general findings were that personality traits, self-evaluative variables, motivational antecedents, and general social support were positively correlated with job search behavior. Demographic variables and generalized expectancy antecedents were weakly associated with search behavior. Specifically, among personality variables, extraversion ($r = .46$) and conscientiousness ($r = .38$) produced medium-sized, positive correlations with job search behavior; other big five traits produced weaker relations with job search behavior. For the generalized expectancy variables, locus of control produced a weak, positive correlation ($r = .05$), but optimism was not significantly associated with search behaviors.

For the self-evaluative variables, job search self-efficacy ($r = .27$) and self-esteem ($r = .24$) produced small-sized, positive correlations with job search behavior. For motivational and social variables, employment commitment ($r = .29$), social support ($r = .24$), and financial need ($r = .21$) produced small, positive correlations with job search behavior. For demographic variables, work-job tenure ($r = -.15$), education ($r = .12$), age ($r = -.06$), gender ($r = .05$), and race ($r = -.05$) were weakly associated with job search behavior, meaning that those with shorter work-job tenure,

those who had higher levels of education, those who were younger, those who were male, and those who were white were all more likely to engage in job search behavior than those with longer work-job tenure, those with lower levels of education, those who were older, those who were female, and those who were non-White.

Fewer studies have examined personal resources associated with any form of emotion focused coping strategies. Kinicki et al. (2000) found that financial resources were not predictive of this type of coping during their initial wave of data collection; however, at the four-month follow-up, having worse finances did predict emotion-focused coping. They also found that having greater coping resources during the initial wave of data collection was positively predictive of emotion-focused coping, but not significantly predictive of problem-focused coping. Solove et al.'s (2015) study looked at financial, social, and personal coping resources and found that all but the financial variables were positively associated with problem-focused coping, and that all coping resources were positively associated with emotion-focused coping. Coping resources have generally not been operationalized in the same ways across studies, which may partly explain the inconsistent findings.

Kanfer et al.'s (2001) meta-analysis also examined the relation of coping resources to re-employment outcomes. They generally found small correlations, with conscientiousness ($r = -.12$), extroversion ($r = -.10$), agreeableness ($r = -.09$), and openness to experience ($r = -.08$) all negatively correlated with length of unemployment (i.e. having higher levels of these four personality traits was weakly associated with a shorter unemployment period). Similar small correlations were found between self-esteem ($r = -.24$), job search self efficacy ($r = -.12$), financial need

($r = -.07$), and length of unemployment. Unexpectedly, employment commitment and social support were not significantly correlated with duration of unemployment. Similarly, locus of control ($r = .12$) and optimism ($r = .10$) were weakly related to unemployment duration (i.e. higher locus of control and optimism was associated with longer unemployment duration). Finally, in terms of demographic variables, they found that age was weakly and negatively associated with re-employment ($r = -.07$) (i.e., being younger is predictive of a greater likelihood of being re-employed) and that race was weakly associated with unemployment duration ($r = .12$) (i.e., being White is associated with a shorter period of unemployment). They also found that level of education was weakly and positively related to re-employment ($r = .07$) and negatively related to unemployment duration ($r = -.07$).

Theoretical Models of Job Loss and Unemployment Coping

The first notable model of unemployment coping was Jahoda's (1981) unemployment deprivation model, which was based on the idea that unemployment leads to decreased well-being because of the latent benefits of work that are lost: structured time, enforced activity, valued relationships and experiences, collective purpose, and identity/status. However, Jahoda's model did not leave much room for the agency and psychology of the individual. This led to the rising prominence of the work of Lazarus and Folkman (1984) on stress, appraisal, and coping in models of unemployment and coping (Gowan, 2014). Major studies from this era, spanning the 1980s to early 2000s, include DeFrank and Ivancevich's (1986) job loss model, Leana and Feldman's (1988) individual responses to job loss model, Kinicki and Latack's (1990) nomological network of coping and development of the Coping with Job Loss

Scale, Leana and Feldman's (1990) Coping Strategies Scale, Latack et al.'s (1995) integrative process model of coping with job loss, Gowan and Gatewood's (1997) model of response to job loss, Waters' (2000) coping, psychological, and employment status model, and McKee-Ryan and Kinicki's (2002) life-facet model of coping with job loss.

DeFrank and Ivancevich (1986) was among the first to propose a comprehensive job loss and coping model. Leana and Feldman's (1988) individual responses to job loss model identified situational and individual predictors of coping behavior after a job loss. Latack et al.'s (1995) integrative process model of coping with job loss addressed the need to create a model that is situationally specific and explored how coping processes work in specific situations; it also drew upon relevant social science theories (e.g. control theory and self-efficacy). Gowan and Gatewood's (1997) model looked at intermediary and long-term outcomes and added to the literature by factoring in positive outcomes that result from job loss. Waters' (2000) coping, psychological, and employment status model looked at the bi-directional relationships between stressors of unemployment, appraisal, coping, and outcomes. Finally, McKee-Ryan and Kinicki's (2002) life-facet model of coping with job loss builds on earlier work by positing that people look at seven life-facets (psychological, physiological, social, spiritual, daily routine, sense of purpose, and financial) after a job loss and conduct a discrepancy appraisal for each life-facet, which then lead to coping goals.

As noted in the introduction, newer models have studied specific populations, examined specific components of re-employment outcomes, or have been created

from a diverse set of theories. An example of a model studying a specific population is Wanberg et al.'s (2016) model of age and re-employment. Wanberg et al. (2002) drew from a wide array of theories to create a multidisciplinary model of re-employment that looked at predictor variables from psychology, sociology, and economics. Finally, a branch of research has looked at re-employment quality, an element of re-employment following job loss. Examples include Zikic and Klehe's (2006) model examining the role of career planning and exploration in predicting re-employment quality, and Koen et al.'s (2010) model examining the role of career adaptability and job search strategies in predicting re-employment quality outcomes. A related branch of research has examined the relationship between job loss and subsequent subjective and objective underemployment (McKee-Ryan & Harvey, 2011), though this work extends beyond the scope of this study.

Career Self-Management Model of Social Cognitive Career Theory

This section will look at how existing job loss coping research fits with the CSM model, relying heavily on Thompson et al.'s (2017) review, which linked relevant findings on job loss, adaptive career behaviors, and job recovery to the variables of the CSM model.

Person input variables in the CSM model can include demographic factors, such as gender, race and ethnicity, and age. Personality factors can include big five traits, such as extraversion and conscientiousness. Contextual influences can be assessed in terms of supports and barriers in relation to particular facets of career behavior. The relation of person inputs, personality factors, and contextual factors to job loss coping and job loss outcomes were covered in earlier sections of this review.

In a job search specific test of the CSM model, Lim et al. (2016) found support for the linkage of conscientiousness to job search self-efficacy, and also found that social support positively predicted outcome expectations. They additionally found that job search goals positively predicted subsequent job search behaviors, which reflect “actions” in the CSM model.

Turning to the cognitive-person variables of the SCCT framework, the variables of self-efficacy and outcome expectations sit at the core of the model. Three studies, Leana and Feldman (1995), Vansteenkiste et al. (2004), and van Dam and Menting (2012) looked at motivational factors, arguing that expectations of prospective employment would affect motivation levels and job search behaviors. Vansteenkiste et al. (2004) and van Dam and Menting (2012) each theorized that low expectations for re-employment stem from a shortage of local jobs, a lack of opportunities in one’s line of work, a lack of necessary experience or training, or being rejected in one’s job search process. Both studies found that negative expectations of finding a job negatively affect job search motivation. However, Leana and Feldman’s (1995) longitudinal study asked participants at T1 to report expectations regarding future employment, finding that by T2 (8 months later), there was no significant difference between the re-employed and the unemployed in their T1 expectations. Looking at re-employment expectations as a form of cognitive appraisal, Petrucci et al. (2015) found that length of unemployment negatively predicted re-employment expectations, and that networking comfort and job search confidence significantly predicted reemployment expectations.

Differentiated from re-employment outcome expectations is job search outcome expectations (JSOE), with the former referring to the expectation of getting a new job, and the latter referring to consequences one expects from carrying out specific job search behaviors. Lim et al. (2016) found that social support and job search self-efficacy significantly positively predicted JSOE, and that JSOE predicted job search goals, but only in one of two studies. Dahling et al. (2013) also found that JSOE significantly predicted job search goals.

Similar to outcome expectations, the literature differentiates between re-employment self-efficacy (RSE) and job search self-efficacy (JSSE), with the former referring to the confidence one has in one's ability to find a new job, and the latter referring to the confidence one has in one's ability to carry out specific tasks that are a part of the job search process. RSE has been found to be negatively correlated with unemployment duration and job search intensity, but positively correlated with number of job interviews and number of job offers received (Vansteenkiste, 2013). Additionally, Westaby and Braithwaite (2003) found that control beliefs and motivational reason variables (specific factors used to explain overall RSE judgments) explained significant variance in RSE.

Kanfer et al.'s (2001) meta-analysis showed that JSSE is positively correlated with job search behaviors, job offers, and re-employment status; it is also negatively correlated with unemployment duration (Kanfer et al, 2001). Liu et al.'s (2014) more recent meta-analysis also showed that JSSE is positively correlated with job search behaviors. Dahling et al. (2013) found a negative relationship between financial strain and JSSE, moderated by regional unemployment rates, but a positive relationship

between JSSE and both search outcome expectations and search goals. Lim et al. (2016) also found a positive relationship of JSSE to JSOE and search goals.

In terms of barriers, Thompson et al. (2017) noted that while greater financial strain has been shown to be associated with shorter unemployment durations, this might be because those with greater financial strain are under greater pressure to accept a job that constitutes subjective underemployment or a job that is not a good fit. Financial strain has also been shown to be negatively correlated to JSSE in areas with high unemployment rates but uncorrelated in areas with low unemployment rates (Dahling et al., 2013). Additionally, as previously noted, less access to financial resources has been shown to be associated with lower levels of psychological well-being (McKee-Ryan et al., 2005).

Thompson et al. (2017) noted that additional barriers might include unemployment stigma that is often associated with extended unemployment, which may lead to being discriminated against in the job search process, though Biewen and Steffes (2010) have found weak evidence for such stigma (2010). Blau et al. (2013) found that unemployment stigma was positively associated with unemployment duration and job search behaviors, but negatively associated with life satisfaction. Additional macronomic variables have been posited as being barriers to re-employment, such as job market conditions and local unemployment rates (Thompson et al., 2017). Finally, certain demographic factors, such as race/ethnicity, gender, sexual orientation, and age (which may be conceived as person input variables in SCCT), have been shown to be barriers to re-employment (Wanberg, 2012).

Lastly, search goals (i.e., the intention to complete specific job search behaviors) have been found to positively predict job search actions (Lim et al., 2016). Coping goals have also been studied in the wider job loss coping literature. For example, Latack et al. (1995) posit that coping goals mediate the relationship between job loss appraisal and coping strategy behaviors. The idea is that individuals will decide if their goal is to be re-employed, to retire, to re-train, or to take time off. They will then pursue coping strategies that help them meet their specific goals (McKee-Ryan & Kinicki, 2002).

Tables

Table 1

Demographics Information for Measure Development and Hypothesis Testing Samples

Variable	Meas. Dev. Sample (n = 196)		Hyp. Testing Sample (n = 406)	
	%	n	%	n
Age				
25-29	19.4	38	21.4	87
30-34	24.0	47	25.4	103
35-39	30.6	60	33.5	136
40-44	26.0	51	19.7	80
Gender Identity				
Male	50.5	99	53.7	218
Female	49.5	97	46.3	188
Race / Ethnicity				
White / European American	69.4	136	69.0	280
Black / African American	13.8	27	12.6	51
Hispanic / Latinx American	7.7	15	10.6	43
Asian / Pacific Islander American	4.1	8	2.7	11
Multi-racial	4.1	8	3.7	15
Native American	1.0	2	1.5	6
Marital Status				
Single	55.1	108	51.2	208
Married	27.6	54	32.0	130
Divorced	8.7	17	10.1	41
Widowed	2.0	4	0.5	2
Other	6.6	13	6.2	25
Highest Level of Education				
Some High School	2.0	4	3.9	16
High School Graduate	30.6	60	30.0	122
Some College	25.0	49	28.1	114
Associate's Degree	17.9	35	10.1	41
Bachelor's Degree	16.8	33	17.2	70
Master's Degree	4.1	8	8.9	36
Professional School Degree	2	4	1.2	5
Doctorate Degree	1.5	3	0.5	2

Household Income				
< \$15,000	19.4	38	20.9	85
\$15,000 - \$24,999	20.4	40	16.0	65
\$25,000 - \$49,999	29.1	57	26.8	109
\$50,000 - \$74,999	9.7	19	13.3	54
\$75,000 - \$99,999	12.8	25	10.6	43
\$100,000 - \$149,999	6.1	12	8.4	34
\$150,000 - \$199,999	1.5	3	2.7	11
≥ \$200,000	1.0	2	1.2	5
Employment Status (following job loss)				
Unemployed	76.5	150	73.4	298
Underemployed	23.5	46	26.8	109
Receiving Unemployment Benefits?				
Yes	16.8	33	18.0	73
No	83.2	163	82.0	333
Receiving Severance Pay?				
Yes	2.6	5	8.6	35
No	97.4	191	91.4	371
Region				
South	39.8	78	40.9	166
West	23.5	46	19.5	79
Midwest	19.4	38	23.2	94
Northeast	17.3	34	16.5	67

Table 2

Coping with Unemployment Scale (CUES) Items and Factor Loadings for Initial, 3-Factor Solution for the Measure Development Sample (n = 196)

Item	<u>Factor Loadings</u>		
	1	2	3
Engaged in activities in my personal life that helped me feel I am being productive with my time.	.77	.02	-.13
Taken the time to organize my day in a structured way.	.77	.09	-.05
Managed my time in a way that helped me feel that I made progress at projects that are important to me.	.74	.00	-.01
Developed a daily routine to substitute for the loss of my former work routine.	.67	.14	-.03
Thought about positive things that could come from losing my job (such as having time to consider other work or life possibilities).	.66	.02	-.06
Stayed involved in social activities that I value.	.64	-.05	-.03
Structured my days around activities that take the place of paid work (such as hobbies, exercise, reading, or self-improvement activities).	.60	-.07	-.04
Spent time on activities that I enjoy doing.	.59	.00	-.07
Found healthy ways to deal with my feelings about the loss of my	.57	.03	.17

job (such as using meditation or seeing a counselor).			
Thought about the things in my life that I am grateful for right now.	.45	.19	.04
Worked at a temporary or part-time job to make ends meet.	.43	.02	.15
Reached out to others for emotional support, when I felt the need.	.41	-.09	.38
Spent time helping others (such as children, relatives, or neighbors).	.32	.06	.24
Submitted resumes to employers with advertised or potential job openings.	-.01	.94	-.18
Listed myself as a job applicant using an online job site or another job-finding source.	.03	.84	-.07
Completed a job application.	-.06	.76	.07
Contacted potential employers directly about actual or potential job openings.	.16	.58	.09
Taken time to review my job qualifications and skills.	.31	.49	.08
Cut back on expenses that are non-essential to make my money stretch further.	-.01	.34	.29
Took on debt in order to pay for things.	.01	.00	.68
Spent some of my savings to pay for living expenses.	.01	.21	.57

Relied on support from family or friends to help with living expenses.	-.07	-.07	.53
Used government or community programs (e.g., unemployment benefits, food stamps, food pantries) to help meet financial needs.	-.02	.01	.43
Contacted an employment or placement service (such as a public job center or a private employment agency).	.21	.28	.31

Note. $n = 196$, KMO index = .89. Factor loadings were obtained with the pattern matrix of the principal axis factoring solution with oblique rotation. 1 = Psychological Coping; 2 = Job Search Coping; 3 = Financial Management Coping. Items are preceded with the question “To what extent have you done the following in the past two weeks?”

Table 3

Hierarchical Regression Analysis for Variables Predicting Well-Being in the Measure Development Sample (n = 196)

	<i>Model 1</i>			<i>Model 2</i>			<i>Model 3</i>			<i>Model 4</i>		
Variable	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Proactive personality	.41	.07	.37*	.21	.07	.19*	.04	.07	.03	.04	.07	.03
Financial strain	-.51	.07	-.41*	-.39	.07	-.32*	-.25	.07	-.20*	-.24	.08	-.20*
Job search behaviors				-.06	.08	-.04	-.11	.08	-.09	-.11	.08	-.09
Job search SE				.34	.09	.25*	.13	.10	.09	.13	.10	.09
Job search support				.39	.09	.27*	.20	.11	.14	.21	.11	.14
Psyc coping behaviors							.22	.11	.15	.22	.11	.15
Psyc coping SE							.48	.12	.33*	.48	.12	.33*
Social support							.07	.06	.09	.08	.06	.09
Finance behaviors										-.02	.07	-.01
R^2		.32			.46			.53			.53	
ΔR^2		.32			.13			.07			.00	
F change		46.02*			15.43*			9.62*			.05	

Notes. * $p < .05$

Table 4

Hierarchical Regression Analysis for Variables Predicting Psychological Distress in the Measure Development Sample (n = 196)

	<i>Model 1</i>			<i>Model 2</i>			<i>Model 3</i>			<i>Model 4</i>		
Variable	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Proactive personality	-.16	.04	-.21*	-.15	.05	-.19*	-.12	.06	-.15*	-.11	.06	-.14
Financial strain	.50	.05	.58*	.49	.05	.57*	.45	.05	.52*	.41	.06	.48*
Job search behaviors				-.01	.06	-.01	-.07	.06	-.08	-.08	.06	-.09
Job search SE				.00	.07	.00	.12	.07	.13	.12	.07	.13
Job search support				-.05	.07	-.05	-.04	.08	-.04	-.05	.08	-.05
Psyc coping behaviors							.20	.08	.20*	.18	.09	.17*
Psych coping SE							-.35	.09	-.36*	-.35	.09	-.35*
Social support							.02	.04	.03	.01	.04	.02
Finance behaviors										.08	.05	.09
R^2		.40			.40			.45			.46	
ΔR^2		.40			.00			.05			.01	
<i>F</i> change		64.31*			.24			5.27*			2.04	

Notes. * $p < .05$

Table 5

Coping with Unemployment Scale (CUES) Final Items and Factor Loadings for the Measure Development Sample (n = 196)

Item	<u>Factor Loadings</u>	
	1	2
Engaged in activities in my personal life that helped me feel I am being productive with my time.	.80	-.05
Taken the time to organize my day in a structured way.	.75	.08
Managed my time in a way that helped me feel that I made progress at projects that are important to me.	.75	-.02
Thought about positive things that could come from losing my job (such as having time to consider other work or life possibilities).	.65	-.01
Developed a daily routine to substitute for the loss of my former work routine.	.65	.15
Stayed involved in social activities that I value.	.63	-.04
Structured my days around activities that take the place of paid work (such as hobbies, exercise, reading, or self-improvement activities).	.62	-.09
Spent time on activities that I enjoy doing.	.59	-.02
Found healthy ways to deal with my feelings about the loss of my job (such as using	.57	.08

meditation or seeing a counselor).		
Thought about the things in my life that I am grateful for right now.	.44	.20
Submitted resumes to employers with advertised or potential job openings.	-.07	.92
Listed myself as a job applicant using an online job site or another job-finding source.	-.02	.85
Completed a job application.	-.05	.77
Contacted potential employers directly about actual or potential job openings.	.14	.61
Taken time to review my job qualifications and skills.	.29	.51
Contacted an employment or placement service (such as a public job center or a private employment agency).	<i>Eliminated</i>	
Worked at a temporary or part-time job to make ends meet.	<i>Eliminated</i>	
Reached out to others for emotional support, when I felt the need.	<i>Eliminated</i>	
Spent time helping others (such as children, relatives, or neighbors).	<i>Eliminated</i>	
Cut back on expenses that are non-essential to make my money stretch further.	<i>Eliminated</i>	
Took on debt in order to pay for things.	<i>Eliminated</i>	

Spent some of my savings to pay for living expenses.	<i>Eliminated</i>
Relied on support from family or friends to help with living expenses.	<i>Eliminated</i>
Used government or community programs (e.g., unemployment benefits, food stamps, food pantries) to help meet financial needs.	<i>Eliminated</i>

Note. $n = 196$, KMO index = .90. Factor loadings were obtained with the pattern matrix of the principal axis factoring solution with oblique rotation. 1 = Psychological Coping (CUES-PC); 2 = Job Search Coping (CUES-JSC). Items are preceded with the question “To what extent have you done the following in the past two weeks?”

Table 6

Self-Efficacy for Psychological Coping with Unemployment (PCUE-SE) Scale Items and Factor Loadings for the Measure Development Sample (n = 196)

Item	<u>Factor Loadings</u>
	1
Find activities and tasks to fill the time I used to spend on work.	.80
Manage my days in a way that feels useful.	.78
Find ways to organize and structure my day in a productive manner.	.78
Deal with my emotions about my job loss in a productive way.	.78
Find time to participate in activities that do not involve work or job searching (e.g., hobbies, exercise, socializing with others).	.74
Recognize the good things in my life that I do have right now.	.72
Accept negative feelings that I might have about losing my job.	.67
See my job loss in an optimistic light.	.64
Be creative in finding ways to make financial ends meet.	.64
Find new ways to make some money during this period despite not having a full-time job.	.63

Obtain financial help from outside sources in order to meet my financial obligations, if I needed financial assistance.	.56
Stay involved in my loved ones' lives by finding ways to support their needs.	<i>Eliminated</i>
Spend time with people who are important to me.	<i>Eliminated</i>
Stay connected and engaged with others through social activities.	<i>Eliminated</i>
Seek out encouragement from important people in my life.	<i>Eliminated</i>
Change how I spend money to match my new financial reality.	<i>Eliminated</i>

Note. $n = 196$, KMO index = .93. Factor loadings were obtained with the factor matrix of the principal axis factoring solution. 1 = Self-Efficacy for psychological coping with unemployment (PCUE-SE). Items are preceded with the prompt "Please indicate how much confidence you have in your ability to do each of the following".

Table 7

Descriptive Statistics for All Variables in Measurement Development Sample (n = 196)

Variable	<i>m</i>	<i>SD</i>	<i>a</i>	<i>Skewness</i>		<i>Kurtosis</i>	
Psyc Coping	3.22	.79	.88	-.06	(.17)	-.60	(.35)
Job Search Coping	3.76	.91	.87	-.56	(.17)	-.32	(.35)
Psyc Coping Self Efficacy	3.35	.81	.91	-.30	(.17)	-.11	(.35)
Job Search Self Efficacy	3.22	.88	.91	-.20	(.17)	-.40	(.35)
Proactive Personality	5.36	1.06	.92	-1.11	(.17)	2.45	(.35)
Social Support	4.58	1.43	.93	-.71	(.17)	.00	(.35)
Job Search Support	3.11	.73	.80	-.39	(.17)	-.05	(.35)
Financial Strain	2.80	.95	.91	-.33	(.17)	-1.11	(.35)
Well Being	3.32	1.17	.91	.06	(.17)	-.63	(.35)
Psyc Distress	2.30	.82	.96	.16	(.17)	-1.03	(.35)

Table 8

Observed Variable Correlations Between SCCT and Validity Estimate Variables for Measure Development Sample (N=196)

Variables	1	2	3	4	5	6	7	8	9	10
1. Psyc Coping	--									
2. Job Search Coping	.52*	--								
3. Psyc Coping SE	.64*	.33*	--							
4. Social Support	.33*	.16*	.42*	--						
5. Job Search SE	.52*	.47*	.66*	.21*	--					
6. Job Search Support	.43*	.22*	.51*	.63*	.41*	--				
7. Proactive Personality	.56*	.40*	.56*	.32*	.44*	.35*	--			
8. Financial Strain	-.20*	.09	-.35*	-.32*	-.11	-.27*	-.07	--		
9. Well Being	.51*	.18*	.65*	.45*	.46*	.51*	.40*	-.43*	--	
10. Psyc Distress	-.20*	-.05	-.44*	-.28*	-.17*	-.27*	-.25*	.60*	-.55*	--

Note. An * indicates that a correlation is significant at the .05 level.

Table 9

CUES Confirmatory Factor Analysis Standardized Loadings for Latent Variables (N=406)

Latent Variable and Items	Standardized Estimate	S.E.	p-value
<i>Psychological Coping Behaviors</i>			
Structured my days around activities that take the place of paid work (such as hobbies, exercise, reading, or self-improvement activities).	0.632	0.036	0.000
Engaged in activities in my personal life that helped me feel I am being productive with my time.	0.699	0.026	0.000
Stayed involved in social activities that I value.	0.697	0.034	0.000
Found healthy ways to deal with my feelings about the loss of my job (such as using meditation or seeing a counselor).	0.645	0.031	0.000
Developed a daily routine to substitute for the loss of my former work routine.	0.732	0.027	0.000
Managed my time in a way that helped me feel that I made progress at projects that are important to me.	0.813	0.021	0.000
Spent time on activities that I enjoy doing.	0.669	0.032	0.000
Thought about the things in my life that I am grateful for right now.	0.550	0.037	0.000
Taken the time to organize my day in a structured way.	0.804	0.023	0.000
Thought about positive things that could come from losing my job (such	0.638	0.032	0.000

as having time to consider other work or life possibilities).			
<i>Job Search Coping Behaviors</i>			
Listed myself as a job applicant using an online job site or another job-finding source.	0.798	0.022	0.000
Submitted resumes to employers with advertised or potential job openings.	0.840	0.024	0.000
Completed a job application.	0.736	0.036	0.000
Taken time to review my job qualifications and skills.	0.689	0.027	0.000
Contacted potential employers directly about actual or potential job openings.	0.712	0.032	0.000

Note. Standardized estimates in bold are significant at the .01 level

Table 10

PCUE-SE Confirmatory Factor Analysis Standardized Loadings for Latent Variables (N=406)

Items	Standardized Estimate	S.E.	p-value
Find time to participate in activities that do not involve work or job searching (e.g., hobbies, exercise, socializing with others).	0.739	0.030	0.000
Recognize the good things in my life that I do have right now.	0.687	0.028	0.000
Deal with my emotions about my job loss in a productive way.	0.765	0.023	0.000
Obtain financial help from outside sources in order to meet my financial obligations, if I needed financial assistance.	0.622	0.035	0.000
Find ways to organize and structure my day in a productive manner.	0.756	0.025	0.000
Accept negative feelings that I might have about losing my job.	0.681	0.036	0.000
Find activities and tasks to fill the time I used to spend on work.	0.764	0.033	0.000
Manage my days in a way that feels useful.	0.792	0.021	0.000
Be creative in finding ways to make financial ends meet.	0.596	0.035	0.000
Find new ways to make some money during this period despite not having a full-time job.	0.538	0.042	0.000
See my job loss in an optimistic light.	0.688	0.034	0.000

Note. Standardized estimates in bold are significant at the .01 level

Table 11

7-Factor Model with Parcels Confirmatory Factor Analysis Standardized Loadings for Latent Variables (N=406)

Latent Variable and Items	Standardized Estimate	S.E.	p-value
<i>Psychological Coping Behaviors</i>			
Psychological Coping Behaviors, Parcel 1	0.864	0.014	0.000
Psychological Coping Behaviors, Parcel 2	0.875	0.014	0.000
Psychological Coping Behaviors, Parcel 3	0.860	0.017	0.000
<i>Psychological Coping Self-Efficacy</i>			
Psychological Coping Self-Efficacy, Parcel 1	0.909	0.011	0.000
Psychological Coping Self-Efficacy, Parcel 2	0.899	0.013	0.000
Psychological Coping Self-Efficacy, Parcel 3	0.864	0.015	0.000
<i>Social Support</i>			
Social Support, Parcel 1	0.922	0.011	0.000
Social Support, Parcel 2	0.932	0.010	0.000
Social Support, Parcel 3	0.927	0.010	0.000
<i>Proactive Personality</i>			
Proactive Personality, Parcel 1	0.843	0.018	0.000
Proactive Personality, Parcel 2	0.907	0.015	0.000
Proactive Personality, Parcel 1	0.828	0.022	0.000

<i>Financial Strain</i>			
Financial Strain, Parcel 1	0.911	0.012	0.000
Financial Strain, Parcel 2	0.851	0.020	0.000
Financial Strain, Parcel 3	0.827	0.020	0.000
<i>Well-Being</i>			
Well-Being, Parcel 1	0.898	0.016	0.000
Well-Being, Parcel 2	0.904	0.012	0.000
Well-Being, Parcel 3	0.830	0.018	0.000
<i>Psychological Distress</i>			
Depression Subscale	0.908	0.011	0.000
Anxiety Subscale	0.883	0.012	0.000
Stress Subscale	0.924	0.011	0.000

Note. Standardized estimates in bold are significant at the .01 level

Table 12

Latent Variable Correlations in 7-Factor Measurement Model Test

Variables	1	2	3	4	5	6	7
1. Psyc Coping Behaviors	--						
2. Psyc Coping SE	.73*	--					
3. Social Support	.52*	.54*	--				
4. Proactive Personality	.59*	.66*	.43*	--			
5. Financial Strain	-.21*	-.37*	-.31*	-.11*	--		
6. Well Being	.69*	.80*	.50*	.52*	-.39*	--	
7. Psyc Distress	-.12*	-.37*	-.20*	-.12*	.65*	-.40*	--

Note. An * indicates that a correlation is significant at the .05 level.

Table 13

*Observed Variable Correlations in the Hypothesis Testing Sample
(n = 406)*

Variables	1	2	3	4	5	6	7
1. Psyc Coping Behaviors	--						
2. Psyc Coping SE	.68*	--					
3. Social Support	.48*	.50*	--				
4. Proactive Personality	.53*	.60*	.39*	--			
5. Financial Strain	-.19*	-.34*	-.28*	-.10	--		
6. Well Being	.63*	.74*	.46*	.46*	-.36*	--	
7. Psyc Distress	-.12*	-.35*	-.20*	-.13*	.59*	-.37*	--

Note. An * indicates that a correlation is significant at the .05 level.

Table 14

Descriptive Statistics for SCCT Variables in Hypothesis Testing Sample (n = 406)

Variable	<i>m</i>	<i>SD</i>	<i>a</i>	<i>Skewness</i>		<i>Kurtosis</i>	
Psyc Coping	3.25	.84	.90	.19	(.12)	-.65	(.24)
Psyc Coping Self Efficacy	3.36	.80	.91	.00	(.12)	-.45	(.24)
Proactive Personality	5.45	.95	.91	-.40	(.12)	-.36	(.24)
Social Support	4.84	1.34	.92	-.55	(.12)	-.29	(.24)
Financial Strain	2.86	.85	.90	-.32	(.12)	-.91	(.24)
Well Being	3.43	1.23	.92	.12	(.12)	-.70	(.24)
Psyc Distress	2.36	.78	.96	-.02	(.12)	-1.05	(.24)

Appendices

APPENDIX A

Coping with Unemployment Scales (CUES)

Instructions: The following is a list of things that unemployed people may do to cope with the challenges of being out of work.

Please indicate how much of the following things you have done in the past two weeks.

Not at all	Somewhat or a Little	A Moderate Amount	A Substantial Amount	A Great Deal
1	2	3	4	5

To what extent have you done the following *in the past two weeks*?

[CUES-Psychological Coping Scale (CUES-PC)]

1. Engaged in activities in my personal life that helped me feel I am being productive with my time.
2. Taken the time to organize my day in a structured way.
3. Managed my time in a way that helped me feel that I made progress at projects that are important to me.
4. Thought about positive things that could come from losing my job (such as having time to consider other work or life possibilities).
5. Developed a daily routine to substitute for the loss of my former work routine.
6. Stayed involved in social activities that I value.
7. Structured my days around activities that take the place of paid work (such as hobbies, exercise, reading, or self-improvement activities).
8. Spent time on activities that I enjoy doing.

9. Found healthy ways to deal with my feelings about the loss of my job (such as using meditation or seeing a counselor).
10. Thought about the things in my life that I am grateful for right now.

[CUES – Job Search Coping Scale (CUES-JSC) – update of Blau (1993) measure]

1. Submitted resumes to employers with advertised or potential job openings.
2. Listed myself as a job applicant using an online job site or another job-finding source.
3. Completed a job application.
4. Contacted potential employers directly about actual or potential job openings.
5. Taken time to review my job qualifications and skills.

APPENDIX B

Self-Efficacy for Psychological Coping with Unemployment Scale (PCUE-SE)

Instructions: The following is a list of things that unemployed people may do to cope with the challenges of being out of work.

Please indicate how much **confidence** you have in your ability to do each of the following.

No confidence at all	Very little confidence	Moderate confidence	Much confidence	Complete confidence
1	2	3	4	5

How much confidence do you have in your ability to ...

1. Find time to participate in activities that do not involve work or job searching (e.g., hobbies, exercise, socializing with others).
2. Recognize the good things in my life that I do have right now.
3. Deal with my emotions about my job loss in a productive way.
4. Obtain financial help from outside sources in order to meet my financial obligations.
5. Find ways to organize and structure my day in a productive manner.
6. Accept negative feelings that I might have about losing my job.
7. Find activities and tasks to fill the time I used to spend on work.
8. Manage my days in a way that feels useful.
9. Be creative in finding ways to make financial ends meet.
10. Find new ways to make some money during this period despite not having a full-time job.
11. See my job loss in an optimistic light.

APPENDIX C

Job Search Self-Efficacy (JSSE-B) – Saks et al. (2015)

Instructions: Using the following scale, please indicate how **confident** you are that you can successfully do each of the following **job search activities**:

Not at all Confident	Slightly Confident	Moderately Confident	Very Confident	Totally Confident
1	2	3	4	5

1. Use social networks to obtain job leads.
2. Prepare resumes that will get me job interviews.
3. Impress interviewers during employment interviews.
4. Make “cold calls” that will get me a job interview.
5. Conduct information interviews to find out about careers and jobs that I am interested in pursuing.
6. Prepare a sales pitch that will attract the interest of employers.
7. Plan and organize a weekly job search schedule.
8. Find out where job openings exist.
9. Use a variety of sources to find good job opportunities.
10. Search for and find good job opportunities.

APPENDIX D

Proactive Personality Scale (PPS) Shortened Version – Seibert et al. (1999)

Instructions: Please indicate the degree to which you agree or disagree with each of the following statements.

Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree
1	2	3	4	5	6	7

1. I am constantly on the lookout for new ways to improve my life.
2. Wherever I have been, I have been a powerful force for constructive change.
3. Nothing is more exciting than seeing my ideas turn into reality.
4. If I see something I don't like, I fix it.
5. No matter what the odds, if I believe in something I will make it happen.
6. I love being a champion for my ideas, even against others' opposition.
7. I excel at identifying opportunities.
8. I am always looking for better ways to do things.
9. If I believe in an idea, no obstacle will prevent me from making it happen.
10. I can spot a good opportunity long before others can.

APPENDIX E

Multidimensional Scale of Perceived Social Support (MSPSS) – Zimet et al. (1988)

Instructions: We are interested in how you feel about the following statements in relation to your job loss. Read each statement carefully. Indicate how you feel about each statement.

Very strongly disagree	Strongly disagree	Mildly disagree	Neutral	Mildly agree	Strongly agree	Very strongly agree
1	2	3	4	5	6	7

1. There is a special person who is around when I am in need.
2. There is a special person with whom I can share my joys and sorrows.
3. My family really tries to help me.
4. I get the emotional help and support I need from my family.
5. I have a special person who is a real source of comfort to me.
6. My friends really try to help me.
7. I can count on my friends when things go wrong.
8. I can talk about my problems with my family.
9. I have friends with whom I can share my joys and sorrows.
10. There is a special person in my life who cares about my feelings.
11. My family is willing to help me make decisions.
12. I can talk about my problems with my friends.

APPENDIX F

Perceived Social Support for Job Search Activity Scale (PSSJSAS) – Rife & Belcher (1993)

Instructions: Please answer the items below using the following scale.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

1. I feel that I am receiving a high level of support for my job search efforts.
2. When I am turned down for a job interview, I receive positive encouragement for continuing my job search efforts.
3. I feel all alone in dealing with the frustrations of searching for a job. (Reverse)
4. Others encourage me to continue searching for a job even when I feel down.
5. I feel that others understand why I want to continue working.
6. ~~No one really understands how hard it is to find a job these days. (Reverse) item eliminated~~
7. If I feel like quitting my search for a job, others encourage me to keep contacting employers.
8. When it comes to searching for a job, I have others supporting me.

APPENDIX G

Financial Strain Scale (FSS) – Ullah (1990)

Instructions: How often have you experienced the following challenges over the **past two weeks**?

Never	Some of the time	Much of the time	All of the time
1	2	3	4

How often have you...

1. ... had serious financial worries.
2. ... not been able to do the things you like to do because of shortages of money.
3. ... not been able to do the things you need to do because of shortages of money.
4. ... not been able to manage on the money you have.

APPENDIX H

Depression, Anxiety, and Stress Scale Short Form (DASS-21) – Lovibond & Lovibond (1995)

Instructions: Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you **over the past two weeks**. There are no right or wrong answers. Do not spend too much time on any statement.

Did not apply to me at all	Applied to me to some degree, or some of the time	Applied to me to a considerable degree, or a good part of time	Applied to me very much, or most of the time
0	1	2	3

1. I found it hard to wind down. [S]
2. I was aware of dryness of my mouth. [A]
3. I couldn't seem to experience any positive feeling at all. [D]
4. I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion). [A]
5. I found it difficult to work up the initiative to do things. [D]
6. I tended to over-react to situations. [S]
7. I experienced trembling (e.g. in the hands). [A]
8. I felt that I was using a lot of nervous energy. [S]
9. I was worried about situations in which I might panic and make a fool of myself. [A]
10. I felt that I had nothing to look forward to. [D]
11. I found myself getting agitated. [S]
12. I found it difficult to relax. [S]

13. I felt down-hearted and blue. [D]
14. I was intolerant of anything that kept me from getting on with what I was doing. [S]
15. I felt I was close to panic. [A]
16. I was unable to become enthusiastic about anything. [D]
17. I felt I wasn't worth much as a person. [D]
18. I felt that I was rather touchy. [S]
19. I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat). [A]
20. I felt scared without any good reason. [A]
21. I felt that life was meaningless. [D]

APPENDIX I

World Health Organization 5-Item Well-Being Index (WHO-5) – World Health Organization (1998)

Instructions: Please indicate for each of the 5 statements which is closest to how you have been feeling over the past 2 weeks

At no time	Some of the time	Less than half the time	More than half the time	Most of the time	All of the time
0	1	2	3	4	5

1. I have felt cheerful and in good spirits.
2. I have felt calm and relaxed.
3. I have felt active and vigorous.
4. I woke up feeling fresh and rested.
5. My daily life has been filled with things that interest me.

APPENDIX J

Recruitment Advertisement

[Headline:]

Participation in a brief study about coping with job loss.

[Details:]

We are a research team based in the College of Education at the University of Maryland (UMD). We are conducting a study (approved by the UMD IRB) on how people ages 25-44 cope with the challenges of losing a job and being out of work.

You are eligible to participate if you (a) are 25 to 44 years old, (b) are currently unemployed due to the involuntary loss of a full-time job, (c) have been unemployed for a period of 2 to 9 months, (d) reside in the U.S., and (e) are currently looking for full-time work.

The purpose of this research project is to study the usefulness of strategies that people use to cope with the challenges of being unemployed. If you choose to participate, you will fill out a 10 minute online survey. Upon completion and confirmation of your responses, you will be compensated through Qualtrics Research Services or through their network of survey and market research organizations.

If you qualify and are interested, please click the link to learn more details about the study, consent to participate, and then complete the survey:

[Link]

Should you have any questions or concerns, you may contact the primary investigator:

Ruogu Jason Wang
rjwang23@terpmail.umd.edu

Thank you for considering participation in our study!

APPENDIX K

Informed Consent Form

CONSENT TO PARTICIPATE

Project Title	Job Loss Coping Strategies Study
Purpose of the Study	This research is being conducted by Ruogu J. Wang, M.A. and Robert W. Lent, Ph.D. at the University of Maryland, College Park. We are inviting you to participate in this research project because you (a) are 25 to 44 years old, (b) currently unemployed due to the involuntary loss of a full-time job, (c) have been unemployed for a period of 2 to 9 months, (d) reside in the U.S., and (e) are currently looking for full-time work. The purpose of this research project is to study the usefulness of strategies that people use to cope with the challenges of being unemployed.
Procedures	The procedures involve you taking an approximately 10-minute survey online. The survey will ask you about your unemployment coping strategies and your confidence in using those strategies. Additionally, it will ask you about your job search outcomes and more generally about your personality, social support system, financial situation, and well-being. Finally, the survey will include some demographic questions. Two sample items are: “To what extent have I taken the time to organize my day in a structured way?” and “How much confidence do I have in my ability to deal with my emotions about my job loss in a productive way?”
Potential Risks and Discomforts	We anticipate that this survey will pose no more risk than what you may reasonably encounter in your daily life. Furthermore, you may discontinue participation at any time. There is a potential risk of discomfort that may come from answering survey questions with regard to you unemployment, which will be mitigated through the provision of resources at the end of the survey that may be useful in coping with unemployment and finding new employment.
Potential Benefits	There are no direct benefits from participating in this research. We hope that, in the future, this study will lead to an improved understanding of the coping strategies that can be used in meeting the challenges of unemployment. This may lead to the development of better and more targeted interventions to support people who are unemployed.

Confidentiality	Taking the survey itself is an anonymous online process, and the survey will ask for no information that may link your identity to your survey responses at any point. We will do our best to minimize any potential loss of confidentiality by collecting the data via an online survey provider and storing the data in that provider's database, which is password protected. Any information downloaded from the survey provider will be stored in a password protected computer. Only the researchers listed above will have access to survey responses.
Compensation	For your participation, you will be compensated with the amount agreed upon through your panel provider for completing the survey. This compensation will be in the amount agreed upon between you and the survey service prior to beginning the survey. Participants must complete the survey to receive compensation.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the primary investigator: Ruogu Jason Wang Counseling, Higher Education, and Special Education University of Maryland – College Park 3214C Benjamin Building, College Park, MD 20742 rjwang23@terpmail.umd.edu
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 For more information regarding participant rights, please visit: https://research.umd.edu/irb-research-participants This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By selecting “Yes, I consent to participate” and clicking on the “continue” button below, you indicate that you are at least 25 years of age; you have

	read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. Please download this consent form now for your records. If you do NOT wish to participate in this study, please select “No, I DO NOT consent to participate” and click “Continue” to decline participation.
	☐ Yes I consent to participate ☐ No I DO NOT consent to participate

APPENDIX L

Demographic Questionnaire

[note: (a) age and (b) length of time since losing your full-time job are included in the pre-screening questions]

1. Gender:

- ☐ Male
- ☐ Female
- ☐ Other (Please Specify): _____

2. Race/Ethnicity: [drop-down menu]

- ☐ Black or African American
- ☐ White or European American
- ☐ Native American
- ☐ Other (please specify) _____
- ☐ Hispanic American or Latino/a
- ☐ Asian/Pacific Islander-American
- ☐ Multiracial

3. Marital Status

- ☐ Single ☐ Divorced
- ☐ Married ☐ Widowed
- ☐ Other

4. Please indicate which option best describes the highest level of education you have attained: [drop-down menu]

- ☐ Less than high school
- ☐ High school graduate (or equivalent)
- ☐ Some college (1-4 years, no degree)
- ☐ Associate's degree (including occupational or academic degrees)
- ☐ Bachelor's degree (e.g., BA, BS)
- ☐ Master's degree (e.g., MA, MS)
- ☐ Professional school degree (e.g., MD, JD)
- ☐ Doctorate degree (e.g., PhD, EdD)

5. Please indicate which option best describes your current total household income [drop-down menu]

- ☐ Less than \$15,000
- ☐ \$15,000 to \$24,999
- ☐ \$25,000 to \$49,999
- ☐ \$50,000 to \$74,999

- ☐ \$75,000 to \$99,999
 - ☐ \$100,000 to \$149,999
 - ☐ \$150,000 to \$199,999
 - ☐ \$200,000 or more
6. About how many hours per week did you typically work in your most recent full-time job? _____
7. Are you currently receiving unemployment benefits?
- ☐ Yes
 - ☐ No
8. Are you currently receiving severance pay?
- ☐ Yes
 - ☐ No
9. Altogether, about how many hours would you say you spent on your search for a full-time job **in the last 2 weeks**? _____
10. How many **job interviews** were offered to you **over the past 2 weeks**?
- ☐ 0
 - ☐ 1
 - ☐ 2
 - ☐ 3
 - ☐ 4
 - ☐ 5
 - ☐ 6 or more
11. How many **actual job offers** did you receive **over the past 2 weeks**?
- ☐ 0
 - ☐ 1
 - ☐ 2
 - ☐ 3
 - ☐ 4
 - ☐ 5
 - ☐ 6 or more
12. How satisfied are you with your job search effort **over the past 2 weeks**?
- ☐ Not at all satisfied

- Somewhat dissatisfied
- Neither dissatisfied nor satisfied
- Somewhat satisfied
- Very satisfied

13. Please indicate which employment status best fits your **current** situation:

- ☐ Had a full-time job loss and are currently unemployed
- ☐ Had a full-time job loss and are currently *under-unemployed* (e.g., currently doing part-time, temporary, gig, or contract work to help make ends meet)
- ☐ Other (Please Specify): _____

14. If you are working a part-time, temporary, gig, or contract job, how many **hours per week** are you working? _____

- ☐ Number of hours per week: _____
- ☐ Not Applicable

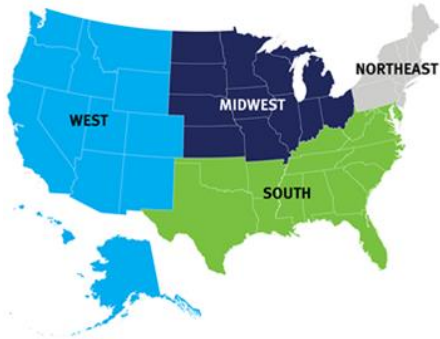
15. Which of the following best describes the primary occupation or type of work you had before you lost your full-time job:

[“16 Career Clusters” from the O*NET – presented as a drop-down menu:]

- ☐ Agriculture, Food & Natural Resources
- ☐ Architecture & Construction
- ☐ Arts, Audio/Video Technology & Communications
- ☐ Business, Management & Administration
- ☐ Education & Training
- ☐ Finance
- ☐ Government & Public Administration
- ☐ Health Science
- ☐ Hospitality & Tourism
- ☐ Human Services
- ☐ Information Technology
- ☐ Law, Public Safety, Corrections & Security
- ☐ Manufacturing
- ☐ Marketing, Sales & Service
- ☐ Science, Technology, Engineering & Mathematics

- ☐ Transportation, Distribution & Logistics
- ☐ Other: Please specify _____

16. What region do you live in?



- ☐ West
- ☐ South
- ☐ Midwest
- ☐ Northeast

APPENDIX M

End of Survey Message

We thank you for your time spent taking this survey. Your response has been recorded.

We would like to end this survey by providing you the following resources that may be useful to you in coping with unemployment and finding new employment:

National Career Development Association – Coping with Unemployment:
https://www.ncda.org/aws/NCDA/pt/sd/news_article/13786/PARENT/CC_layout_details/false

The Occupational Information Network:
<https://www.onetonline.org/>

The Alliance of Career Resource Professionals:
https://www.ncda.org/aws/ACRP/pt/sp/home_page

Bibliography

- Abbey, A., Abramis, D. J., & Caplan, R. D. (1985). Effects of different sources of social support and social conflict on emotional well-being. *Basic and Applied Social Psychology*, 6(2), 111-129.
- Abebe, M. A., & Welbourne, J. L. (2015). Blessing in disguise? Coping strategies and entrepreneurial intentions following involuntary job loss. *Journal of Developmental Entrepreneurship*, 20(04), 1-22.
- Austenfeld, J. L., & Stanton, A. L. (2004). Coping through emotional approach: a new look at emotion, coping, and health-related outcomes. *Journal of Personality*, 72(6), 1335-1364.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103-118.
- Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods & Research*, 16(1), 78-117.
- Berchick, E. R., Gallo, W. T., Maralani, V., & Kasl, S. V. (2012). Inequality and the association between involuntary job loss and depressive symptoms. *Social Science & Medicine*, 75(10), 1891-1894.
- Biewen, M., & Steffes, S. (2010). Unemployment persistence: Is there evidence for stigma effects?. *Economics Letters*, 106(3), 188-190.
- Blau, G. (1993). Further exploring the relationship between job search and voluntary individual turnover. *Personnel Psychology*, 46(2), 313-330.

- Blau, G., Petrucci, T., & McClendon, J. (2013). Correlates of life satisfaction and unemployment stigma and the impact of length of unemployment on a unique unemployed sample. *Career Development International*, 18(3), 258-280.
- Brown, D. J., Cober, R. T., Kane, K., Levy, P. E., & Shalhoop, J. (2006). Proactive personality and the successful job search: A field investigation with college graduates. *Journal of Applied Psychology*, 91(3), 717.
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4(1), 92-100.
- Dahling, J. J., Melloy, R., & Thompson, M. N. (2013). Financial strain and regional unemployment as barriers to job search self-efficacy: A test of social cognitive career theory. *Journal of Counseling Psychology*, 60(2), 210-218.
- DeFrank, R. S., & Ivancevich, J. M. (1986). Job loss: An individual level review and model. *Journal of Vocational Behavior*, 28(1), 1-20.
- Fawehinmi, O. O., & Yahya, K. K. (2018). Investigating the linkage between proactive personality and social support on career adaptability amidst undergraduate students. *Journal of Business and Social Review in Emerging Economies*, 4(1), 81-92.
- Feldman, D. C., Leana, C. R., & Bolino, M. C. (2002). Underemployment and relative deprivation among re-employed executives. *Journal of Occupational and Organizational Psychology*, 75(4), 453-471.

- Forsythe, E., Kahn, L. B., Lange, F., & Wiczer, D. (2020). Labor demand in the time of COVID-19: Evidence from vacancy postings and UI claims. *Journal of Public Economics*, 189, 104238.
- Fryer, D. (1986). Employment deprivation and personal agency during unemployment: A critical discussion of Jahoda's explanation of the psychological effects of unemployment. *Social Behaviour*, 1(1), 3–23.
- Gallo, W. T., Bradley, E. H., Teng, H. M., & Kasl, S. V. (2006). The effect of recurrent involuntary job loss on the depressive symptoms of older US workers. *International Archives of Occupational and Environmental Health*, 80(2), 109-116.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272.
- Federal Reserve (2022). Transcript of Chair Powell's Press Conference March 15, 2022. Retrieved from <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20220316.pdf>
- Fuller Jr, B., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, 75(3), 329-345.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9(1), 139-145.
- Gorsuch, R. L. (1997). Exploratory factor analysis: Its role in item analysis. *Journal of Personality Assessment*, 68(3), 532-560.

- Gowan, M. A. (2014). Moving from job loss to career management: The past, present, and future of involuntary job loss research. *Human Resource Management Review, 24*(3), 258-270.
- Gowan, M. A., & Gatewood, R. D. (1997). A model of response to the stress of involuntary job loss. *Human Resource Management Review, 7*(3), 277-297.
- Gowan, M. A., Riordan, C. M., & Gatewood, R. D. (1999). Test of a model of coping with involuntary job loss following a company closing. *Journal of Applied Psychology, 84*(1), 75-86.
- Hanisch, K. A. (1999). Job loss and unemployment research from 1994 to 1998: A review and recommendations for research and intervention. *Journal of Vocational Behavior, 55*(2), 188-220.
- Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology, 44*(2), 227-239.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55.
- Huijts, T., Reeves, A., McKee, M., & Stuckler, D. (2015). The impacts of job loss and job recovery on self-rated health: testing the mediating role of financial strain and income. *The European Journal of Public Health, 25*(5), 801-806.
- Jahoda, M. (1981). Work, employment, and unemployment: Values, theories, and approaches in social research. *American Psychologist, 36*(2), 184-191.

- Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personality–motivational analysis and meta-analytic review. *Journal of Applied Psychology, 86*(5), 837-855.
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., Walters, E. E., & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32*(6), 959-976.
- Kinicki, A. J., & Latack, J. C. (1990). Explication of the construct of coping with involuntary job loss. *Journal of Vocational Behavior, 36*(3), 339-360.
- Kinicki, A. J., Prussia, G. E., & McKee-Ryan, F. M. (2000). A panel study of coping with involuntary job loss. *Academy of Management Journal, 43*(1), 90-100.
- Koen, J., Klehe, U. C., Van Vianen, A. E., Zikic, J., & Nauta, A. (2010). Job-search strategies and reemployment quality: The impact of career adaptability. *Journal of Vocational Behavior, 77*(1), 126-139.
- Krieger, T., Zimmermann, J., Huffziger, S., Ubl, B., Diener, C., Kuehner, C., & Holtforth, M. G. (2014). Measuring depression with a well-being index: further evidence for the validity of the WHO Well-Being Index (WHO-5) as a measure of the severity of depression. *Journal of Affective Disorders, 156*, 240-244.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613.

- Langens, T. A., & Mose, E. (2006). Coping With Unemployment: Relationships Between Duration of Unemployment, Coping Styles, and Subjective Well-Being. *Journal of Applied Biobehavioral Research*, 11(3-4), 189-208.
- Latack, J. C., Kinicki, A. J., & Prussia, G. E. (1995). An integrative process model of coping with job loss. *Academy of Management Review*, 20(2), 311-342.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer Publishing Company.
- Leana, C. R., & Feldman, D. C. (1988). Individual responses to job loss: Perceptions, reactions, and coping behaviors. *Journal of Management*, 14(3), 375-389.
- Leana, C. R., & Feldman, D. C. (1990). Individual responses to job loss: Empirical findings from two field studies. *Human Relations*, 43(11), 1155-1181.
- Leana, C. R., & Feldman, D. C. (1995). Finding new jobs after a plant closing: Antecedents and outcomes of the occurrence and quality of reemployment. *Human Relations*, 48(12), 1381-1401.
- Leana, C. R., Feldman, D. C., & Tan, G. Y. (1998). Predictors of coping behavior after a layoff. *Journal of Organizational Behavior*, 19(1), 85-97.
- Lent, R.W., & Brown, S.D. (2021). Career development and counseling: An introduction. In S.D. Brown and R.W. Lent (Eds.), *Career Development and Counseling: Putting Theory and Research to Work* (3rd ed.) (pp. 1-29). Hoboken, NJ: Wiley.
- Lent, R. W., & Brown, S. D. (2006). On conceptualizing and assessing social cognitive constructs in career research: A measurement guide. *Journal of Career Assessment*, 14(1), 12-35.

- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79-122.
- Lent, R. W., Morris, T. R., Wang, R. J., Moturu, B. P., Cygrymus, E. R., & Yeung, J. G. (in press). Test of a social cognitive model of proactive career behavior. *Journal of Career Assessment*.
- Lent, R. W., Wang, R. J., Cygrymus, E. R., & Moturu, B. P. (2022). Psychological Coping with Job Loss: A Social Cognitive Perspective. Poster session presented at the 130th Annual Convention of the American Psychological Association, Minneapolis, MN.
- Lim, R. H., Lent, R. W., & Penn, L. T. (2016). Prediction of job search intentions and behaviors: Testing the social cognitive model of career self-management. *Journal of Counseling Psychology*, 63(5), 594.
- Lin, X., & Leung, K. (2010). Differing effects of coping strategies on mental health during prolonged unemployment: A longitudinal analysis. *Human Relations*, 63(5), 637-665.
- Little, T.D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. (2013). Why the items versus parcels controversy needn't be one. *Psychological Methods*, 18(3), 285-300.

- Liu, S., Huang, J. L., & Wang, M. (2014). Effectiveness of job search interventions: A meta-analytic review. *Psychological Bulletin*, 140(4), 1009–1041.
- Liu, S., Wang, M., Liao, H., & Shi, J. (2014). Self-regulation during job search: The opposing effects of employment self-efficacy and job search behavior self-efficacy. *Journal of Applied Psychology*, 99(6), 1159.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335-343.
- McKee-Ryan, F. M., & Harvey, J. (2011). “I have a job, but...”: A review of underemployment. *Journal of Management*, 37(4), 962-996.
- McKee-Ryan, F. M., & Kinicki, A. J. (2002). Coping with job loss: A life-facet perspective. *International Review of Industrial and Organizational Psychology*, 17, 1-30.
- McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: a meta-analytic study. *Journal of Applied Psychology*, 90(1), 53-76.
- McLoughlin, C., Casey, S., Feeney, A., Weir, D., Abdalla, A. A., & Barrett, E. (2021). Burnout, Work Satisfaction, and Well-being Among Non-consultant Psychiatrists in Ireland. *Academic Psychiatry*, 45(3), 322-328.
- Muller, J. J., Creed, P. A., Waters, L. E., & Machin, M. A. (2005). The Development and Preliminary Testing of a Scale to Measure the Latent and Manifest

- Benefits of Employment. *European Journal of Psychological Assessment*, 21(3), 191-198.
- Murphy, G. C., & Athanasou, J. A. (1999). The effect of unemployment on mental health. *Journal of Occupational and Organizational Psychology*, 72(1), 83-99.
- Muthén, L.K., & Muthén, B.O. (1998-2019). *Mplus user's guide. Eighth edition*. Los Angeles, CA: Muthén & Muthén.
- National Center for O*NET Development (2022). O*NET Resource Center (2022). Retrieved from <https://www.onetonline.org/find/career>.
- Ortiz, L. P. A., & Farrell, M. P. (1993). Father's unemployment and adolescent's self-concept. *Adolescence*, 28(112), 937-949.
- Osman, A., Wong, J. L., Bagge, C. L., Freedenthal, S., Gutierrez, P. M., & Lozano, G. (2012). The depression anxiety stress scales—21 (DASS-21): further examination of dimensions, scale reliability, and correlates. *Journal of Clinical Psychology*, 68(12), 1322-1338.
- Parker, K. & Horowitz, J.M. (2022, March 9). Majority of workers who quit a job in 2021 cite low pay, no opportunities for advancement, feeling disrespected. *Pew Research Center*. Retrieved from <https://www.pewresearch.org/fact-tank/2022/03/09/majority-of-workers-who-quit-a-job-in-2021-cite-low-pay-no-opportunities-for-advancement-feeling-disrespected/>
- Payne, R., Warr, P., & Hartley, J. (1984). Social class and psychological ill-health during unemployment. *Sociology of Health & Illness*, 6(2), 152-174.
- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior*, 74(3), 264-282.

- Perera, B. P. R., Jayasuriya, R., Caldera, A., & Wickremasinghe, A. R. (2020). Assessing mental well-being in a Sinhala speaking Sri Lankan population: validation of the WHO-5 well-being index. *Health and Quality of Life Outcomes*, 18(1), 1-9.
- Perrucci, C. C. (1994). Economic strain, family structure and problems with children among displaced workers. *Journal of Sociology and Social Welfare*, 21(79), 79-92.
- Petrucchi, T., Blau, G., & McClendon, J. (2015). Effect of age, length of unemployment, and problem-focused coping on positive reemployment expectations. *Journal of Employment Counseling*, 52(4), 171-177.
- Pignault, A., & Houssemand, C. (2017). Normalizing unemployment: a new way to cope with unemployment?. *Basic and Applied Social Psychology*, 39(6), 372-386.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544.
- Pohlan, L. (2019). Unemployment and social exclusion. *Journal of Economic Behavior & Organization*, 164(2019), 273-299.
- Quintini, G., & Venn, D. (2013). Back to work: Re-employment, earnings and skill use after job displacement. OECD. Retrieved from <https://www.oecd.org/els/emp/Backtowork-report.pdf>
- Rife, J. C., & Belcher, J. R. (1993). Social support and job search intensity among older unemployed workers: Implications for employment counselors. *Journal of Employment Counseling*, 30(3), 98-107.

- Saks, A. M., Zikic, J., & Koen, J. (2015). Job search self-efficacy: Reconceptualizing the construct and its measurement. *Journal of Vocational Behavior*, 86(2015), 104-114.
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology*, 84(3), 416-427.
- Solove, E., Fisher, G. G., & Kraiger, K. (2015). Coping with job loss and reemployment: A two-wave study. *Journal of Business and Psychology*, 30(3), 529-541.
- Song, L., Shi, J., Luo, P., Wei, W., Fang, Y., & Wang, Y. (2020). More time spent, more job search success?: The moderating roles of metacognitive activities and perceived job search progress. *Journal of Career Assessment*, 28(1), 147-164.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16(3), 282-298.
- Thompson, M. N., Dahling, J. J., Chin, M. Y., & Melloy, R. C. (2017). Integrating job loss, unemployment, and reemployment with Social Cognitive Career Theory. *Journal of Career Assessment*, 25(1), 40-57.
- Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: a systematic review of the literature. *Psychotherapy and Psychosomatics*, 84(3), 167-176.
- Ullah, P. (1990). The association between income, financial strain and psychological well-being among unemployed youths. *Journal of Occupational Psychology*, 63(4), 317-330.

- U.S. Bureau of Labor Statistics (2022). Labor Force Statistics from the Current Population Survey. Retrieved from <https://www.bls.gov/cps/>.
- Van Dam, A. (2022, February 23). *The Washington Post*. Retrieved from <https://www.washingtonpost.com/business/2022/02/23/savings-bank-accounts-covid/>
- Van Dam, K., & Menting, L. (2012). The role of approach and avoidance motives for unemployed job search behavior. *Journal of Vocational Behavior*, 80(1), 108-117.
- Van Hove, G., & Lootens, H. (2013). Coping with unemployment: Personality, role demands, and time structure. *Journal of Vocational Behavior*, 82(2), 85-95.
- Vansteenkiste, M., Lens, W., De Witte, S., De Witte, H., & Deci, E. L. (2004). The ‘why’ and ‘why not’ of job search behaviour: their relation to searching, unemployment experience, and well-being. *European Journal of Social Psychology*, 34(3), 345-363.
- Vansteenkiste, S., Verbruggen, M., & Sels, L. (2013). Being unemployed in the boundaryless career era: Does psychological mobility pay off?. *Journal of Vocational Behavior*, 82(2), 135-143.
- Vinokur, A. D., Price, R. H., & Caplan, R. D. (1996). Hard times and hurtful partners: how financial strain affects depression and relationship satisfaction of unemployed persons and their spouses. *Journal of Personality and Social Psychology*, 71(1), 166-179.

- Vinokur, A. D., & Schul, Y. (2002). The web of coping resources and pathways to reemployment following a job loss. *Journal of Occupational Health Psychology, 7*(1), 68-83.
- Wanberg, C. R. (1997). Antecedents and outcomes of coping behaviors among unemployed and reemployed individuals. *Journal of Applied Psychology, 82*(5), 731–744.
- Wanberg, C. R., Hough, L. M., & Song, Z. (2002). Predictive validity of a multidisciplinary model of reemployment success. *Journal of Applied Psychology, 87*(6), 1100-1120.
- Wanberg, C. R., Kanfer, R., Hamann, D. J., & Zhang, Z. (2016). Age and reemployment success after job loss: An integrative model and meta-analysis. *Psychological Bulletin, 142*(4), 400-426.
- Wanberg, C. R., van Hooft, E. A., Dossinger, K., van Vianen, A. E., & Klehe, U. C. (2020). How strong is my safety net? Perceived unemployment insurance generosity and implications for job search, mental health, and reemployment. *Journal of Applied Psychology, 105*(3), 1-21.
- Warr, P., & Jackson, P. (1987). Adapting to the unemployed role: A longitudinal investigation. *Social Science & Medicine, 25*(11), 1219-1224.
- Warr, P., Jackson, P., & Banks, M. (1988). Unemployment and mental health: Some British studies. *Journal of Social Issues, 44*(4), 47-68.
- Waters, L. E. (2000). Coping with unemployment: A literature review and presentation of a new model. *International Journal of Management Reviews, 2*(2), 169-182.

- Waters, L. (2007). Experiential differences between voluntary and involuntary job redundancy on depression, job-search activity, affective employee outcomes and re-employment quality. *Journal of Occupational and Organizational Psychology*, 80(2), 279-299.
- Westaby, J. D., & Braithwaite, K. N. (2003). Specific factors underlying reemployment self-efficacy: Comparing control belief and motivational reason methods for the recently unemployed. *The Journal of Applied Behavioral Science*, 39(4), 415-437.
- World Health Organization (1998). Wellbeing Measures in Primary Health Care: The Depcare Project, 1998. *Copenhagen: WHO, Regional Office for Europe*.
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist*, 34(6), 806-838.
- Zacher, H. (2013). Older job seekers' job search intensity: The interplay of proactive personality, age and occupational future time perspective. *Ageing & Society*, 33(7), 1139-1166.
- Zikic, J., & Klehe, U. C. (2006). Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality. *Journal of Vocational Behavior*, 69(3), 391-409.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30-41.