2022

Hope's Moderating Effects on Crisis Workers' Meaning in Work and Turnover Intentions

Rachel Alexis Drosdick-Sigafoos
Walden University

Walden University

College of Psychology and Community Services

This is to certify that the doctoral dissertation by

Rachel Drosdick-Sigafoos

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Tina Jaeckle, Committee Chairperson,
Human and Social Services Faculty

Dr. Gregory Hickman, Committee Member,
Human and Social Services Faculty

Dr. Shari Jorissen, University Reviewer,
Human and Social Services Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2022

Abstract

Hope's Moderating Effects on Crisis Workers' Meaning in Work and Turnover Intentions

by

Rachel Drosdick-Sigafoos

MA, New England College, 2010

BA, Muhlenberg College, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human and Social Services: Disaster, Crisis, and Intervention

Walden University

May 2022

Abstract

High turnover in the human services field has been a widespread issue, with the annual turnover rate above 31% from 2015 to 2019. Such turnover disrupts client care and burdens workers who stay, increasing turnover intentions among remaining team members. Researchers have examined turnover risk factors, with meaning in work emerging as a reliable protective factor against turnover intentions. This study was conducted to assess the relationship between meaning in work in turnover intentions, hope and turnover intentions, and whether hope moderated the relationship between meaning in work and turnover intentions among crisis-serving human services professionals (HSPs). A quantitative, cross-sectional, correlational research design was used. Data were collected from 116 HSPs employed in a crisis field. The theory of job embeddedness framed this study. Moderating regression analysis was used to understand the relationship between meaning in work and turnover intentions, hope and turnover intentions, and whether hope moderated the meaning in work/turnover intention relationship. A statistically significant, positive relationship between meaning in work and turnover intentions was found, a divergence from the directionality of the relationship in existing literature. Hope did not account for variance in turnover intentions at a statistically significant level, nor did hope moderate the relationship between meaning in work and turnover intentions at a statistically significant level. The results could have implications for positive social change by providing relevant data for human resources personnel and crisis-serving organizations about the need for robust support and retention strategies to alleviate stressors and recent job departure trends.

Hope's Moderating Effects on Crisis Workers' Meaning in Work and Turnover Intentions

by

Rachel Drosdick-Sigafoos

MA, New England College, 2010

BA, Muhlenberg College, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human and Social Services: Disaster, Crisis, and Intervention

Walden University

May 2022

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Introduction

Human services professionals (HSPs) in the United States have an exceptionally high rate of turnover, persistently above 31% from 2015–2019, according to the U.S. Bureau of Labor and Statistics (2020). High stress and low job satisfaction tend to coincide with actual turnover and turnover intentions among HSPs (Asikainen et al., 2020; Chang et al., 2019). Although little research has been published about turnover and turnover intentions among crisis responders, evidence indicates that disaster responders with limited perceived supports have much higher turnover intentions than those who perceive high support (Guilaran et al., 2018). Exposure to violence, whether directly (Asikainen et al., 2020; Lamonthe & Guay, 2017) or indirectly (Tavormina & Clossey, 2017), worsens HSPs' emotional strain and diminishes job satisfaction, which are both related to stronger turnover intentions (Agyapong et al., 2015; Christian-Brandt et al., 2020; McDermid et al., 2020).

Researchers have persistently reported that employees with high meaning in work are less likely to consider leaving their jobs (Akgunduz et al., 2020; Chang et al., 2019; Fouché et al., 2017; Vermooten et al., 2019), but this relationship has not been assessed for crisis workers. Further, researchers have not examined whether hope moderates the meaning in a work/turnover intention relationship. In this chapter, I provide an overview of existing literature, describe the social problem and research gap, outline the study's nature, define important terms, and identify the scope and delimitations.

Background

Governmental organizations (BLS, 2020) and researchers (Bong, 2019; Bukach et al., 2017; Fukui et al., 2020; Kim, 2019a) have reported high turnover among human services professions. High turnover threatens effective client care as providers struggle to maintain continuity and could shutter programs due to chronic insufficient staffing (Woltmann and Whitley, 2007) in a field where job openings hover between 27% and 40% (Lisinski, 2019), and 72% of providers report difficulty filling jobs (Citino et al., 2017). Professional stress is a powerful driver of high turnover intentions and actual turnover among HSPs (Bong, 2019; Husain et al., 2016), with turnover becoming a stressor to workers who remain while others depart (Chung & Choo, 2019).

Prolonged or intense, acute exposure to trauma, duress, and decision making pressure heighten the psychological risk on HSPs who work in crisis environments (Guilaran et al., 2018; Nagamine et al., 2018; Rose et., 2015; Wines et al., 2019). Crisis environments are those in which an HSP comes in direct contact with individuals and communities because of acute trauma or devolvement, disposing the client to a state of disequilibrium (Yeager & Roberts, 2015). Such stress can increase posttraumatic stress (Nagamine et al., 2018; Wines et al., 2019) and has been associated with unusually high suicidal thoughts and behaviors (Rose et al., 2015). High posttraumatic stress response, high turnover intentions, and diminished job satisfaction have been demonstrated among HSPs who have been assaulted on the job (Lamonthe & Guay, 2017), witnessed violence in their workplace (Wilson et al., 2018), or fear that their job poses a risk to their well-being (Agyapong et al., 2015) across crisis or noncrisis environments.

Meaning in work has a demonstrated relationship with turnover intention, such that workers who report high meaning in their work tend to have a lower desire to leave their jobs (Akgunduz et al., 2020; Chang et al., 2019; Fouché et al., 2017; Vermooten et al., 2019). Researchers have reported that meaning in work can moderate the effects of burnout (Leunissen et al., 2018; Passmore et al., 2020) and unsatisfactory working conditions (Arnoux-Nicolas et al., 2016) on turnover intentions. People who feel their work contributes to the world's betterment (Sun et al., 2019), feel a calling to their work (Fouché et al., 2017), and are engaged with their work (Vermooten et al., 2019) tend to have higher meaning in work and lower turnover intentions.

Although hope may influence how a person thinks and acts in the face of perceived challenges (Snyder, 2002; Snyder et al., 1991), researchers who have studied helping professionals' hope have historically assessed how professionals' hope impacts their clients' care (Barzilay et al., 2018; Flesaker & Larsen, 2010; Stuart et al., 2019). However, few researchers have examined whether helping professionals emotionally benefit from their own sense of hope and to what degree hope buoys professional satisfaction (Browning et al., 2019). For example, child abuse pediatricians with higher hope and meaning in work have been found to have lower secondary traumatic stress and burnout symptoms (Passmore et al., 2020). Hospice workers have reported that their hope and meaning in life positively affected their well-being and they had higher work engagement than rehabilitation workers (Shiri et al., 2020). Chapter 2 will provide a comprehensive analysis of research related to crisis HSPs, meaning in work, hope, and turnover intentions.

Problem Statement

Although the aforementioned research regarding high turnover intentions and actual turnover illuminates important findings, I found no research conducted to examine the extent to which hope moderates the relationship between meaning in work and turnover intentions among crisis-serving HSPs. Given such, further research was warranted to examine hope's moderating effects on crisis workers' meaning in work and turnover intentions to address the documented problem of turnover in human services (Citino et al., 2017; Lisinski, 2019).

Purpose of Study

The purpose of this quantitative, cross-sectional, correlational study was to assess whether hope moderated the relationship between meaning in work and turnover intentions among HSPs who work in crisis environments. I examined the weight of hope as a protective factor against high turnover intentions to alleviate the human services staffing crisis. This research study has the potential to broaden the understanding of the potential pathways that enable helping professionals to remain in the field, expanding on existing literature in which researchers primarily have assessed turnover risk factors.

Research Questions and Hypotheses

RQ1: What is the relationship between meaning in work and turnover intention among HSPs who work in crisis environments?

$H_0$1: There is no statistically significant relationship between meaning in work and turnover intentions among HSPs who work in crisis environments.

H_a1: There is a statistically significant relationship between meaning in work and turnover intention among HSPs who work in crisis environments.

RQ2: What is the relationship between hope and turnover intentions among HSPs who work in crisis environments?

$H_0 2$: There is no statistically significant relationship between hope and turnover intentions among HSPs who work in crisis environments.

$H_a 2$: There is a statistically significant relationship between hope and turnover intentions among HSPs who work in crisis environments.

RQ3: What is hope's moderating effect on the relationships of meaning in work and turnover intentions among HSPs who work in crisis environments?

$H_0 3$: Hope does not moderate the relationship between meaning in work and turnover intentions at a statistically significant level among HSPs who work in crisis environments.

$H_a 3$: Hope does moderate the relationship between meaning in work and turnover intentions at a statistically significant level among HSPs who work in crisis environments.

Theoretical Framework for the Study

The theory of job embeddedness, proposed by Mitchell et al. (2001), provided the theoretical framework to conceptualize this research study. Job embeddedness is used to consider the dynamism of employees' internal and external environments, including how protective factors influence their stay/leave decisions (Mitchell et al., 2001). This theory

framed this research study design and analysis by integrating hope and meaning in work as protective factors affecting employees' intention to stay or leave their job roles.

Nature of Study

I used a quantitative, cross-sectional, correlational method using primary data to conduct this study. Meaning in work was an independent variable (IV), hope was the potential moderating variable (MV), and turnover intentions was the dependent variable (DV). Meaning in work was assessed using Lips-Wiersma and Wright's (2012) Comprehensive Meaningful Work Scale (CMWS), hope was measured using Snyder et al.'s (1991) 12-item Adult Hope Scale (AHS), and turnover intention was measured using Cohen's (1999) Turnover Intention Scale (TIS).

In this study, I used convenience and snowball sampling. Invitations for study participation were shared through professional networks via social media. Inclusion criteria were that participants must be at least 18 years of age and currently employed in a paid, crisis-serving, human services position. I will further explain the study method details in Chapter 3.

Definitions

Crisis environment: Any professional environment in which an HSP comes in direct contact with individuals or communities due to a recent acute trauma or devolvement contributing to intense client disequilibrium (Yeager & Roberts, 2015). This includes prehospital personnel, behavioral health crisis and inpatient staff, disaster responders, child welfare professionals, domestic violence shelter advocates, crisis intervention team (CIT) members, and disaster responders.

Great Resignation: A period in which millions of employees voluntarily left their jobs and many others considered leaving their jobs (Barley & Sullivan, 2022).

Hope: The potential moderating variable is a construct consisting of pathways and agentic thinking that spurs people toward action, perseverance, and achievement (Snyder et al., 1991).

Human services professional (HSP): Employees whose work promotes self-sufficiency, proficiency, and well-being toward optimal functioning across major life domains (Johnson & Brookover, 2021). This includes client-serving employees in residential, vocational, therapeutic, educational, and medical environments (Teixeira Moffat, 2011).

Meaning in work: The independent variable is an individual's feeling of their work's significance, worthwhile purpose, and reflection of their values, selves, and goals (Steger et al., 2012).

Turnover intention: The dependent variable is an employee's plan to leave their current position (Mobley et al., 1979).

Assumptions

I assumed that respondents would answer honestly regarding their inclusion criteria and their survey responses. I also assumed that the stress level due to the ongoing COVID-19 pandemic did not influence the study variables. Additionally, I assumed that the sampling strategies would produce a generalizable, representative sample of crisis-serving HSPs (Hayes & Rockwood, 2017; Wienclaw, 2019). I assumed that the variables

had a linear or approximately linear relationship and that responses would be reasonably normally distributed (Hayes, 2018).

Scope and Delimitations

This study was limited to examining meaning in work, hope, and turnover intentions among crisis-serving HSPs. Although research on these topics often also included measures of distress or incorporation of risk factors for turnover intentions (Brabson et al., 2020), in this study, I did not assess these variables because researchers have identified an unfeasible number of risk factors (Brabson et al., 2020). I focused on protective factors in stay/leave intentions because job embeddedness is used to examine why people choose to stay in their roles (Lips-Wiersma & Wright, 2012). Ragin (2014) warned against spurious conclusions due to a researcher's choice not to address confounding variables—in this case, the magnitude of participants' traumatic stress and other factors related to turnover intentions, such as flexible scheduling or supervisory relationships. In this research study, I also did not assess actual voluntary turnover due to an infeasible time requirement because researchers have typically gathered this information for 1 year after collecting turnover intention survey data. I selected close-ended Likert-type scales for this study to assess the moderating effect. The closed-ended Likert-type scales produce numerical ratings for each variable required to complete a regression analysis (Hayes, 2018). I delimited this study to exclude HSPs who do not currently work in crisis environments as this study sought to better understand turnover intentions and protective factors only among crisis HSPs.

Limitations

Possible limitations or threats to the internal validity of this study were respondents' self-selection bias, such that individuals with polarized turnover intentions may be more likely to respond than those with moderate turnover intentions (Borjas & Edo, 2021). Participant self-selection of exposure to the dependent variable—in this case, turnover intentions—may limit this study's conclusions (de Haan et al., 2015). Because I used a correlational design, the research does not imply any causal relationship between the variables (Johnson, 2001; Taylor, 1990). Although the correlational design can quantify a problem, it is a less scientifically sound quantitative design because a researcher can draw limited affirming conclusions and offer no solutions (Russo, 2011). The use of convenience sampling limited the generalizability of the results, but intentional invitations for participation may have somewhat alleviated this concern (Wall Emerson, 2021). These limitations may therefore diminish the external validity and generalizability of the results.

Significance

This research study could potentially promote social change by identifying protective factors to crisis workers' desire to leave their jobs. Because reducing turnover facilitates favorable, efficacious client care (Woltmann & Whitley, 2007), stakeholders include people and communities experiencing a crisis or trauma. Crisis-serving human services agencies, from coworkers to human resources, can also benefit from this research. Because I examined professionals across crisis fields, organizations benefitting from this research could include those responding to crises and disasters, from the

physical healthcare sector to behavioral health to child welfare to disaster relief agencies and organizations, including the Red Cross, child protective services, psychiatric crisis and inpatient facilities, and prehospital emergency departments. This research could be used to justify and guide the development of programs and supports to address staffing crises by improving the retention of knowledgeable, capable, healthful, and well-equipped helping professionals across the continuum of care. Alleviating staffing crises will thus enhance the quality and flow of service delivery to those in need.

Summary

In this chapter, I provided an overview of my quantitative, cross-sectional, correlational research study. The social problem of high turnover among HSPs has been examined through many risk factors; however, few researchers have investigated hope as a protective factor, nor have crisis HSPs been adequately assessed for any of the variables. This research study was conducted to examine whether crisis HSPs' meaning in work related to turnover intentions similarly to other fields and to assess hope as a novel protective factor against turnover intentions. Participants completed three validated Likert-type scales—Cohen's (1999) TIS, Lips-Wiersma & Wright's (2012) CMWS, and Snyder et al.'s (1991) AHS—and I used moderating regression analysis to test the research hypotheses. In Chapter 2, I will provide an in-depth review and synthesis of existing literature, and in Chapter 3, I will formally outline the research methods.

Chapter 2: Literature Review

Introduction

The purpose of this quantitative cross-sectional research study was to examine the relationship between meaning in work and turnover intentions, hope and turnover intentions, and whether hope moderated the relationship between crisis workers' importance in work and turnover intentions at a statistically significant level. In this chapter, I contextualize and synthesize existing literature on HSPs' turnover intentions, hope, and meaning in work through the framework of job embeddedness. I incorporate research highlighting HSPs' ratings and experiences of hope, meaning in work, and turnover intentions, highlighting research in which HSPs working in crisis environments were participants. The established relationships between the variables are discussed; however, due to a limited number of studies in which researchers examined crisis workers specifically, I include studies of noncrisis HSPs related to the study variables.

Literature Search Strategy

Using the Thoreau and PsycINFO databases through the Walden University Library and Google Scholar, I explored literature about HSPs, meaning in work, hope, turnover intentions, and job embeddedness. Thoreau was the primary database, but I used PsycINFO and Google Scholar if resources were not available through Thoreau. I aimed to use resources published within the past 5 years or seminal literature, and I limited my search to peer-reviewed articles. When searches failed to yield a prolific amount of literature, I gathered sources that provided relevant historical perspectives. When searches yielded a vast number of results, I narrowed the search terms to the titles or

abstracts. I paired searches by topic using the "or" search function for variables with interchangeable terms. These searches included: *turnover intentions OR intention to leave OR intention to quit OR withdrawal intention* (*n* = 11,615), *retention OR intent to stay OR intent to remain OR continuance commitment* (*n* = 29,970), *hope OR hopefulness* (*n* = 17,799), *meaning in work OR meaning of work OR meaningful work* (*n* = 10,745), *crisis OR emergency services OR disaster response OR disaster relief OR child protective services OR child welfare* (*n* = 88,856), and *job embeddedness* (*n* = 519). To optimally capture the scope of literature around the hope construct, I retained and included articles about professionals outside of human services, as there was minimal data about hope among HSPs.

Theoretical Foundation

A person's professional role represents just one of the myriad identities they inhabit in their daily life, producing habits and behaviors that can appear idiosyncratic but draw from group identity patterns (Turner, 1985; Turner, 1987). Mitchell et al. (2001) incorporated this personality and behavioral dynamism in the theory of job embeddedness by considering both on- and off-the-job factors contributing to professional attachments and behaviors. I selected the theory of job embeddedness as this study's theoretical framework to explore how protective factors like hope and meaning in work contribute to respondents' desire to remain in their job roles.

Job Embeddedness

Mitchell et al. (2001) proposed the theory of job embeddedness to explain why people stay in their jobs, a departure from previous literature that primarily sought to

explain why people leave. The researchers conceptualized intentions and decisions to stay or leave through attachment theory, asserting that individuals' on- and off-the-job fit, links, and sacrifices dynamically influence turnover intentions. The theory of job embeddedness conceptualizes employees' stay/leave intention factors through three facets: (a) relationships to others, called links; (b) fit within their role and environment; and (c) potential sacrifices associated with job departure (Mitchell et al., 2001).

Links are the meaningful relationships that employees have both within and outside the organization that could influence decision making, such as familial pressure to remain in a job or respect for team members (Fasbender et al., 2019). Fit is defined as an employee's perception of their alignment and compatibility with their position and employer, including practical aspects like relevant skills and personal alignment of values, goals, and vision (Ko & Lee, 2019). Sacrifices include an employee's considerations of the material and psychological losses from leaving their post (Mitchell et al., 2001). These sacrifices could include practical losses, like seniority, advancement opportunities, or benefits packages, and the psychological strain of misalignment or emotional tax of work.

Job embeddedness represents the "totality of forces" that contribute to employees' decisions to remain in their positions (Mitchell et al., 2007, p. 1115). Job embeddedness significantly negatively predicted actual turnover better than job attitudes and perceived ease of movement, with embeddedness subject to fluctuations due to organizational culture and employee sociodemographics (Yang et al., 2011). Thus, researchers argued

that job embeddedness presents a better model of leave/stay decisions than others due to off-the-job nonaffective factors (Yang et al., 2011).

The theory of job embeddedness arose from a historical focus on employees' decisions to leave their jobs. Since the 1970s, theorists have proposed models of stay/leave decisions, largely seeking to explain turnover. These included Mobley's (1977) turnover intention theory and Mitchell and Lee's (2001) unfolding model of turnover. Mitchell was the lead author and primary theorist for both the unfolding model of turnover and the theory of job embeddedness. Because the theory of job embeddedness grew from a historical framework focused on decisions to leave, these theories provide context to Mitchell et al.'s (2001) theoretical approach to stay/leave decision making.

Mobley's Turnover Intention Theory

The theory of job embeddedness responded to and incorporated other behavior theories (Mitchell et al., 2001), especially Mobley's (1977) turnover intention theory. Mobley (1977) theorized that employee turnover follows a predictable pathway with little deviation from the model. Mobley's approach uses syllogism to predict turnover, where job satisfaction limits the likelihood that an individual will follow the linear model toward departure. Mobley theorized that the most likely deviation from the model is an impulsive departure in which an employee leaves their post without warning. Mobley et al. (1979) later distinguished between present job satisfaction and future job attraction and expected utility. In this modification to Mobley's initial theory, the researchers considered off-the-job motivations to stay or leave, which Mobley's original theory did not. Mobley did not ultimately adopt these considerations into his theory of turnover,

though theorists later added these factors in constructing the theory of job embeddedness (Mitchell et al., 2001). Mobley's theory has been both supported (Lee, 1988) and disputed (Miller et al., 1979; Mowday et al., 1984). Differences like age, length of tenure, and meaning in work more prominently predicted turnover intention than rote job satisfaction (Miller et al., 1979; Mowday et al., 1984). Griffeth and Hom (1988) assessed Mobley's turnover theory components and reported that turnover intention was the only significant predictor of actual turnover. Griffeth coauthored Mobley et al.'s (1979) expanded conceptualization of turnover. Griffeth and Hom (1988) reported that job satisfaction had only an indirect, nonsignificant relationship with actual turnover, but job satisfaction partially predicted turnover intention.

Unfolding Model of Turnover

Mitchell and Lee (2001) proposed the unfolding model of voluntary turnover simultaneous to Mitchell et al.'s (2001) theory of job embeddedness to explain actual employee departures, with the unfolding model and job embeddedness using the same foundational ideas. Mitchell and Lee explained voluntary turnover as having four distinct pathways to departure: (a) script-driven path, (b) push decision, (c) pull decision, and (d) chronic assessment.

First, an employee experiences a shock to the system or a single event that dislodges the employee from their post by the severe violation(s) of their values or self-imposed rules and leads to a sudden departure with no pending alternative employment. An example of a rules violation in pathway one would be an employee being asked to violate their ethical code, wherein the employee has already decided, "if I am ever asked

to violate this ethic, I will quit." Mitchell and Lee called pathway one a script-driven path. Second, the employee experiences a shock to the system that forces them to compare their values to their organization without a predetermined boundary and course of action. Pathway two differs from pathway one because the employee has not previously identified their plan should they experience such a shock and, therefore, must consider their options among their entire work schema. Mitchell and Lee described pathway two as a push decision because an employee feels pushed toward departure.

In pathway three, an employee experiences a shock to the system without a preidentified course of action but has a specific job alternative already available to them. Notably, the shock in pathway three can be negative, as in one and two, or positive, like another company attempting to poach the employee. Because an external option is already available in pathway three, the researchers call this pathway a pull decision. In the final pathway, an employee chronically assesses their fit at their organization and determines their values increasingly differ without one distinguishable shock. Employees on pathway four are more likely to depart slowly, according to the authors, because there is no single notable shock to dislodge the employee.

Crossley et al. (2007) argued that job embeddedness goes beyond the unfolding model of voluntary turnover by expanding on the personal characteristics that influence voluntary turnover. These researchers incorporated existing turnover research in which age predicted actual turnover and turnover intentions and affective commitment directly predicted actual turnover. The unfolding model did not incorporate either of these factors; perceived alternatives—central to pathway three—only directly affected turnover

intention but did not directly predict actual voluntary turnover. However, job embeddedness interacted with job satisfaction to predict turnover intentions and voluntary turnover, providing more credence for job embeddedness theory than Mobley's turnover theory (Crossley et al., 2007).

Job Embeddedness

Scholars have proposed several theories and many factors to explain employees' departure decisions. Explaining why people choose to leave does not explain why others stay (Mitchell et al., 2001). Turnover theorists have not incorporated the dynamism of on- and off-the-job factors (Mitchell et al., 2001) that produce subjectively idiosyncratic decisions (Turner, 1985; Turner, 1987). I selected the theory of job embeddedness as this study's theoretical framework to deepen the understanding of protective factors in stay decisions, especially how transcendent factors like meaning in work and hope influence employees' desire to stay in their jobs.

As leave-focused theories like the turnover intention theory and unfolding model of turnover and the subsequent research evaluations demonstrate, formulaic models may not fully express employees' stay/leave decisions. These formulaic models focused on practical aspects, like job satisfaction and job alternatives, of stay/leave decisions. Because I assessed whether transcendent factors reduce crisis workers' turnover intentions in this research study, I selected the theory of job embeddedness for its flexible, dynamic approach.

Literature Review Related to Key Variables and Concepts

Crisis Human Services Professionals

Job Roles of Crisis HSPs

Employees' relationships with one another and their organizations have a multi-pathway relationship with factors contributing to workplace attitudes, beliefs, and behaviors. Crisis-serving HSPs encounter clients due to trauma or acute distress causing a state of disequilibrium (Yeager & Roberts, 2015). Crisis-serving HSPs include (a) prehospital personnel, such as emergency medical services (EMS) and emergency department (ED) medical professionals and social workers; (b) behavioral health crisis or inpatient staff; (c) domestic violence shelter advocates; (d) disaster responders; (e) child welfare professionals; and (f) CIT members. These jobs include specializing in responding to individuals and communities in states of inappropriate arousal (e.g., hyper- or hypo-arousal) and providing brief treatment to establish pathways to healthy equilibrium (James & Gilliland, 2017). Crisis HSPs may not facilitate equilibrium in all cases; rather, crisis workers may assess clients' level of need and provide recommendations and referrals for services that can reestablish equilibrium (James & Gilliland, 2017). ED medical providers met the inclusion criteria for this research study because they respond to and provide dispositions for medical and psychiatric critical care patients (Brucker et al., 2018).

Estimating Number of Paid Crisis HSPs in the United States. Limited data is available to quantify or estimate the number of crisis-serving HSPs in the United States, as the Bureau of Labor and Statistics (BLS) mostly generalizes crisis personnel within

their specialty rather than classifying crisis workers separate from their non-crisis counterparts. For example, the BLS does not distinguish ED medical providers from all medical providers (BLS, 2021c) nor behavioral health crisis workers from all behavioral health providers (BLS, 2021b). Bennett et al. (2020) reported 48,835 emergency department clinically active physicians in 2020, increasing 9,774 ED doctors since 2008. The BLS does not classify child welfare workers nor domestic violence responders as unique careers. EMTs and paramedics are exceptions, with the BLS estimating 265,200 EMT and paramedic jobs in 2019 (BLS, 2021a). The BLS (2018) estimated roughly 170,000 disaster workers in 2018 and projected a need of 180,600 disaster workers by 2026 but has not provided more recent data.

Crisis HSPs' Responsibilities. Crisis needs heighten the skill requirement and emotional acumen to protect professionals, their clients, and the communities they serve to prevent further traumatizing the already vulnerable population (James & Gilliland, 2017). Beyond the emotional scope of returning clients in crisis to a state of equilibrium, crisis workers must implement more stringent documentation to demonstrate actions taken to keep clients safe (Cole-King & Platt, 2017; Stanley et al., 2019). Cole-King and Platt (2017) emphasized the need to remain supportive by instilling hope and empowerment while retaining awareness of barriers to safety and potential legal and bureaucratic backlash. Nonetheless, some professionals tending to even the most extreme crises, like severe suicide risk, lack proper training to assess, respond to, and mitigate these events (Stanley et al., 2019).

HSPs' psychoemotional attenuation may persist through various levels of their working experience (Scouten et al., 2017; Sundram et al., 2018). EMS professionals and emergency department medical personnel may need to move from one trauma or critical event to the next without the opportunity to debrief, satisfying their professional drive while potentially compounding personal struggles (Shiri et al., 2020; Wines et al., 2019). As Furness et al.'s (2020) EMS archetypes demonstrate, the cost of staying moving while being unmoved is simultaneously a badge of honor and a detriment to emergency response workers' overall well-being (Rose et al., 2015). Wilson et al. (2018) also described the balance of maintaining the external appearance of coolness while an employee is internally battling, such as when inpatient mental health professionals have to use physical, mechanical, or chemical restraints to ensure safety. Once the unit is physically safe, staff must respond to other clients' needs, delaying debriefing and self-care with possible detriment to their personal and professional wellness (Wilson et al., 2018).

Compounding the emotional-bureaucratic balance crisis HSPs navigate, some HSPs also represent competing systems and values while trying to deliver the best possible care (Nelson et al., 2017). Helping professionals also grapple with balancing their organization's encouragement to focus on fiscal growth against the community's need for support (Sundram et al., 2018). Some helpline workers noted that they were encouraged to keep calls short and focus only on depressive symptoms. Hence, operators felt they could not adequately explore social and environmental issues contributing to callers' needs (Sundram et al., 2018).

Social workers for asylum refugees (Nelson et al., 2017) and domestic violence shelter advocates (Merchant and Whiting, 2015) have reported similar challenges balancing competing needs. Social workers for asylum refugees expressed discomfort that they must enforce and defend the law even as they attempt to validate and console their traumatized clients (Nelson et al., 2017). An example provided by researchers was that a client had witnessed his father's murder and was smuggled out of Afghanistan for safety, only to be subsequently described as noncompliant for occasional failure to attend school and complete assignments (Nelson et al., 2017). Staff respondents reported feeling torn between their ethical responsibilities to such clients and their bureaucratic responsibility to uphold the detention center's expectations as severe trauma symptoms commonly earned noncompliance labels that would eventually disqualify them from asylum status (Nelson et al., 2017). Likewise, advocates at a short-term domestic violence shelter expressed role confusion and dissatisfaction when asking a resident to leave because the resident had reached their maximum period of living in the shelter (Merchant & Whiting, 2015). Respondents felt they were pushing clients back toward unhealthy or unsafe situations by forcing residents to leave, though they understood why these guidelines were in place (Merchant & Whiting, 2015).

Stressors of Crisis HSPs

Historical Research Perspectives. Crisis HSPs' trauma and challenges have been extensively assessed both qualitatively and quantitatively (Kitchingman et al., 2018b; Fukui et al., 2020; Wilson et al., 2018), with increasing interest coinciding with the formalization of the posttraumatic stress disorder phenotyping in the 1970s (van der

Kolk, 2014). Researchers before this era focused on survivors' responses (Barton, 1969), but as veteran trauma became a prominent subject in the U.S.'s collective conscience, concern for crisis-serving professionals became a more expansive research topic. At the outset, researchers prioritized task-focused articles, outlining what crisis workers were doing, how they organized, and what services they delivered (Zarle et al., 1974). Over the next 20 years, researchers integrated crisis professionals' traumatic stress responses into the greater trauma literature (Chisholm et al., 1983; Laube-Morgan, 1992).

9/11 and Hurricane Katrina ushered in a new era of crisis worker research, with a notable bent toward the magnitude and proliferation of professionals' traumas. Two different research tracks developed within this era: some researchers remained focused on paid, formally trained crisis workers (Tarvydas et al., 2017), while others emphasized volunteers' responses, especially within disaster response (Smoyak, 2005) and helpline workers (Paterson et al., 2009; Sundram et al., 2018). Though the latter track had already begun emerging (Whiting, 1998), research on crisis volunteers appeared more frequently after these two catastrophic events. Researchers have continued to publish process-oriented and best practices literature for crisis professionals (Waters, 2001), but new guidelines often incorporate professionals' well-being into practice recommendations (Tarvydas et al., 2017).

Quantifying Stress Among Crisis HSPs

The sum of HSPs' responsibilities can manifest into many kinds of distress, including direct or secondary trauma, burnout, behavioral health disorders (Kitchingman et al., 2018a; Kitchingman et al., 2018b), and, for some, lethality (Rose et al., 2015).

Such distress can hamper service delivery and reduce employees' effectiveness (Kitchingman et al., 2018b; Wilson et al., 2018). Furthermore, professional distress can increase turnover intentions and actual turnover among HSPs (Fukui et al., 2020; Wilson et al., 2018). This section will describe recent literature about the stressors crisis HSPs face and the potential outcomes of professional distress.

Professionals who work in crisis environments regularly encounter lethality (Gilliatt et al., 2018; Tavormina and Clossey, 2017; Wines et al., 2019), violence (Asikainen et al., 2020; Tavormina and Clossey, 2017; Wilson et al., 2018), illness (Rose et al., 2015), and destruction (Guilaran et al., 2018; Scouten et al., 2017). These stressors damage psychological well-being (Guilaran et al., 2018; Nagamine et al., 2018; Passmore et al., 2020; Scouten et al., 2017; Wines et al., 2019), increase suicidal ideation and attempts (Kitchingman et al., 2018a; Rose et al., 2015), and heighten disordered mental health and substance use (Lee et al., 2017). Crisis workers across fields reported becoming hardened or numb because of their professional stress (Asikainen et al., 2020; Merchant & Whiting, 2015; Tavormina & Clossey, 2017; Wines et al., 2019).

Bureaucratic Stress. Bureaucratic stressors compound crisis HSPs' occupational stress, diminishing their job satisfaction and job fit perceptions (Bosk et al., 2020). Paperwork and large caseloads weigh down child welfare professionals, causing them to feel ineffectual and overwhelmed (Lee et al., 2017). Crisis responders report higher professional stress when they have to sacrifice what they perceive to be optimal client care to comply with their organizations' rules and guidelines (Merchant & Whiting, 2015; Nelson et al., 2017). For example, domestic violence shelter advocates working in

term-limited shelters struggled with guilt that they were forcing clients into instability by asking clients to leave when they had reached their maximum number of nights in shelter residence (Merchant & Whiting, 2015).

Supervisory Factors. Research across crisis fields has demonstrated the ability of supervisory support to alleviate or heighten distress. Staff on inpatient mental health units experienced aggression or assault even as their management failed to adequately staff the floors or listen to employees' concerns and provide quality feedback (Asikainen et al., 2020). Telephone crisis workers who received structured feedback and positive support from supervisors were less likely to report high stress and intention to leave their roles (Sundram et al., 2018). A lack of efficacious supervisory support grates child welfare professionals (Lee et al., 2017, p. 397), worsened by overly bureaucratic supervisors who did not validate employees' experiences or support employees' mental health efforts (Lee et al., 2017).

Symptoms and Outcomes

Crisis responders report disturbances to their emotional and behavioral health due to their job stress (Passmore et al., 2020; Rose et al., 2015; Tavormina & Clossey, 2017). EMS personnel (N = 4022) contemplated suicide ten times more (37% vs. 3.7%) and had attempted suicide 13 times more (6.6% vs. .5%) than the U.S. general population (Rose et al., 2015). Prehospital professionals expressed intense anger, depression, anxiety, hopelessness, intrusive thoughts, disturbed sleeping, and nightmares (Wines et al., 2019). They also cited feeling helpless, especially toward supporting the patients' loved ones, recalling questions and cries from parents' young children who could not understand

what was happening (Wines et al., 2019). Likewise, child welfare professionals reported incessant feelings of worry and powerlessness, emotional fatigue, fears for own safety, preoccupation with work that obstructs self-care and appropriate boundaries, and emotional and physical overload or shutdown (Tavormina & Clossey, 2017).

Helpline support workers have attributed vicarious trauma, stress, burnout, and the development or exacerbation of psychiatric disorders to their work (Kitchingman et al., 2018b). Thirty-eight percent of telephone crisis workers had considered suicide (Kitchingman et al., 2018a), similar to the rate of suicidal ideation of EMS personnel (Rose et al., 2015). Notably, respondents reported more severe symptoms of anxiety, stress, and STS in the week preceding a shift on the crisis line versus the week after a shift (Kitchingman et al., 2018a). During the time-series analysis, every respondent reported mild burnout and STS symptoms (Kitchingman et al., 2018a). Passmore et al. (2020) reported similar burnout rates and secondary traumatic stress (STS) among child abuse pediatricians (CAPs), coinciding with intrusive thoughts and avoidance. Domestic violence shelter staff (Merchant and Whiting, 2015) and EMS personnel (Wines et al., 2019) have also reported that unmet expectations in their ability to help and heal their clients contributed to distress.

Among uniformed disaster relief workers, women, officers, and medics had higher general psychological distress than their counterparts (Nagamine et al., 2018). Disaster relief workers who easily imagined themselves in disaster survivors' situations were more likely to report general psychological distress during the response mission (Nagamine et al., 2018). The authors attributed this to the respondents' likelihood to

identify with and imagine themselves in the situations of those they were helping (Nagamine et al., 2018). The researchers also reported that general psychological distress tended to present comorbidly with posttraumatic stress responses (Nagamine et al., 2018). Several researchers noted that younger respondents and those with no prior disaster experience were more likely to report more severe distress or posttraumatic stress (Nagamine et al., 2018; Scouten et al., 2017). Over 42% of disaster relief workers stated their operational stress/mental health impacted their work, with comorbid traumatic stress symptoms increasing this risk (Scouten et al., 2017). As disaster responders spent more time providing relief services, psychological distress increased, with a sharp decline in distress during periods away from the disaster (Scouten et al., 2017).

Non-crisis HSPs reported that experiencing violence (Lamothe and Guay, 2017), unsuitable resources (Agyapong et al., 2015), emotional exhaustion (Chang et al., 2019; Fukui et al., 2020; Woudstra et al.; 2018), and poor work-life balance (Fukui et al., 2020) tax their wellness and job satisfaction, suggesting that crisis- and non-crisis HSPs share common professional stressors. Several researchers included sexual harassment or assault in their depictions of professional duress (Lamothe & Guay, 2017; Woudstra et al., 2018). Fear or experience of victimization on the job overwhelmingly heightened occupational stress and employees' intentions to leave their jobs (Agyapong et al., 2015; Lamothe & Guay, 2017; Woudstra et al., 2018). Medical professionals who had been assaulted expressed a loss of trust in their organization and coworkers, further isolating these employees (Lamothe & Guay, 2017). Respondents described being verbally or digitally bullied (Woudstra et al., 2018), physically attacked (Lamothe & Guay, 2017;

Woudstra et al., 2018), and sexually harassed and assaulted (Lamothe & Guay, 2017; Woudstra et al., 2018).

Coping Mechanisms

Researchers have demonstrated HSPs' use of maladaptive coping skills to manage their professional distress (Lee et al., 2017; Tavormina & Clossey, 2017; Wines et al., 2019). Child welfare professionals (Tavormina & Clossey, 2017) and EMS personnel (Wines et al., 2019) reported hardening themselves to persist through their exposure to trauma. Child welfare professionals also reported using drugs or alcohol, depersonalizing clients, disengagement, and disbelieving clients (Lee et al., 2017). Child welfare professionals who used these maladaptive coping mechanisms also tended to report higher job stress (Lee et al., 2017). Inpatient mental health staff also depersonalized clients, which increased patients' proneness to violence, as direct care staff exhibited more hurriedness, less availability, and insufficient positive programming (Asikainen et al., 2020). Asikainen et al. (2020) noted that such distancing and the use of coercive or forceful restraint tactics worsened employees' experiences by increasing incidences of client-on-staff violence. Interpersonal support from coworkers and supervisors prevented psychological distress in EMS personnel (Rose et al., 2015) and disaster relief personnel (Guilaran et al., 2018).

Telephone crisis workers were more likely to use positive coping skills, like acceptance and seeking emotional support, than negative coping techniques, like substance use and behavioral disengagement (Kitchingman et al., 2018a). Some child welfare professionals (Tavormina & Clossey, 2017) and prehospital personnel (Wines et

al., 2019) have reported experiencing personal growth and appreciation for their childhood resources. People who felt their professional trauma pushed them to increase their autonomy or support others also experienced improved professional satisfaction and posttraumatic growth (Hannagan, 2017; Lamothe & Guay, 2017).

Meaning in Work

Steger et al. (2012) defined meaning in work as the sum of an individual's feelings of their work's significance, worthwhile purpose, and reflection of their self, values, and goals, which comprise psychological meaningfulness, making meaning through work, and greater good motivations. Rosso et al. (2010) incorporated the individual's values, motivation, and beliefs, their perceptions of their coworkers, leaders, and groups, and their community with others into meaning in work. Several researchers have described meaning in work as a spiritual or transcendent factor, drawing in values- and perceptions-based components (Rosso et al., 2010; Schnell et al., 2013). This section will describe conceptualizations and relevant research to situate meaning in work factors and outcomes.

Development of Concept of Meaning in Work

Friedmann and Havighurst (1954) introduced meaningful work as a formal concept in their book *The Meaning of Work and Retirement*. The authors argued that people work for more than financial wellness; they derive personal satisfaction from their occupations. Morse and Weiss (1955) responded with a study assessing whether people would continue to work if they came into enough money to live comfortably for the remainder of their lives without work. Eighty percent of people responded yes, and

Morse and Weiss's reports on why people would continue to work quantified Friedmann and Havighurst's observations. Though *The Meaning of Work and Retirement* garnered academic praise (Stieglitz, 1954; Williams, 1955), scholarly literature between the 1950s and 1990s was scant and tended to focus on young people entering the workforce (Kaiser, 1981), employment preparation programs (Lerner, 1997), and women workers (Gini & Sullivan, 1988).

In the late 1990s, scholars reengaged meaning in work for the broader working population and began evaluating meaning in work as a transcendent concept (Strong, 1998; Treadgold, 1999). Meaning in work publications exploded in the early 2000s, with continued interest in young workers (Carter & Lunsford, 2005) and women (Boris & Kleinberg, 2003).

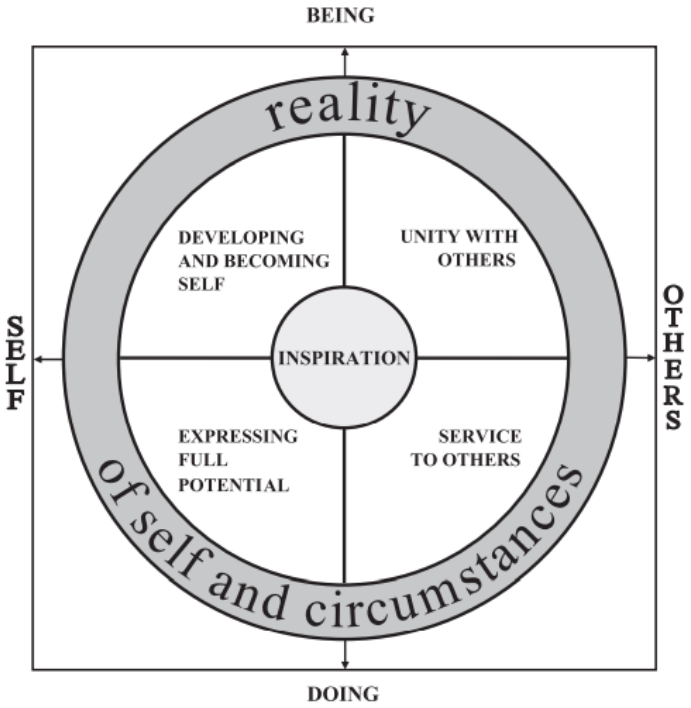
In the 2010s, several theorists developed conceptualizations of meaning in work, then validated several instruments measuring meaning in work. Rosso et al. (2010) proposed a compass representation of meaning in work. The authors theorized that meaning in work balanced self versus others and agency versus communion (Rosso et al., 2010). The scholars proposed the self/agency domain represented individuation, the others/agency contribution, others/communion unification, and self/communion self-connection. Rosso and colleagues also asserted that the self constructs and interprets meaningfulness perceptions and is subjective. The researchers also argued against siloed meaning in work conceptualizations as they fail to integrate the holistic, dynamic person. They likewise questioned conceptualizations that overemphasized self-orienting pathways to meaning in work, hence their agency/communion spectrum.

Schnell et al. (2013) produced one such siloed meaning in work conceptualization, identifying person, work tasks, and organization as domains feeding meaning in work. The organization domain contained standalone factors of socio-moral climate and self-transcendent orientation. Work tasks had two factors: task significance, which did not cross over with other domains, and work-role fit. The person domain shared work-role fit and did not contain other factors.

This research study utilized Lips-Wiersma and Wright's (2012) conceptualization of meaning in work. Lips-Wiersma and Wright proposed meaning in work as a compass with balanced poles and domains (Figure 1), and Lips-Wiersma approved the inclusion of the figure in this document (Appendix A). Self/others represent one set of poles and being/doing represents the perpendicular poles. The self-being domain involves developing and becoming self. The others-being domain involves unifying with others. The others-doing domain is service to others, and the self-doing domain expresses the individual's full potential. The reality of self and circumstances encapsulates the entire compass, and inspiration is the compass center. The authors proposed that employees progress toward higher meaning in work when their role enables them to engage in all four domains.

Figure 1

Lips-Wiersma and Wright's Meaning in Work Compass



Meaning in Work and Organizational Culture

Employees find meaning in work relative to their perceptions of organizational culture through their satisfaction with autonomous job crafting (Heleno et al., 2018; Vermooten et al., 2019), rewards/recognition (Akgunduz et al., 2020; Heleno et al., 2018; Lamothe & Guay, 2017), relationships with supervisors and coworkers (Fouché et al., 2017; Schnell et al., 2013), and the organization's social mission (Schnell et al., 2013; Sun et al., 2019). Professional autonomy and job crafting are opportunities for employees to add their flair or shape their tasks within their job description (Heleno et al., 2018; Vermooten et al., 2019). Job crafting directly and positively predicted meaning in work and employee engagement (Vermooten et al., 2019). Low autonomy diminished meaning

in work and was the most reported reason to leave among educators, while high classroom autonomy tied for the most common contributor to meaning in work and intention to remain in their position (Heleno et al., 2018).

Relationships with others have also predicted employees' perceptions of meaning in work (Converso et al., 2018; Fouché et al., 2017; Heleno et al., 2018; Lamothe & Guay, 2017; Lavy & Naama-Ghanayim, 2020; Rosso et al., 2010). Undesirable interpersonal interactions and culture, including devaluation, threats, gossip (Heleno et al., 2018), and violence (Lamothe and Guay, 2017) diminished meaning in work. On the other hand, positive coworker relations have been a powerful positive predictor of meaning in work (Fouché et al., 2017; Heleno et al., 2018; Lamothe & Guay, 2017; Rosso et al., 2010). Perceptions of positive relationships with clients increased meaning in work (Heleno et al., 2018; Lavy & Naama-Ghanayim, 2020). Preschool teachers with musculoskeletal disorders were likely to report that high relational demands from students and their families increased their desire to leave their work, with meaning in work mediating this relationship (Converso et al., 2018). Healthy preschool teachers did not report significant changes in meaning in work or turnover intentions due to relational demands (Converso et al., 2018). The authors posited that physical wellness leaves room to meet relational demands, adding that health is crucial to teachers' relationships with their jobs (Converso et al., 2018). Teachers with high meaning in work were more likely to have students who felt cared for and had high self-esteem (Lavy & Naama-Ghanayim, 2020).

Organizational support for workers has also influenced meaning in work.

Financial rewards and employees' perceptions of adequate pay increased meaning in work (Akgunduz et al., 2020; Heleno et al., 2018). Rosso et al. (2010) disagreed that financial rewards directly influence meaning in work and instead theorized that perceptions of adequate pay validate employees' meaning. Employees were more likely to accept lower wages if they perceived high meaning in work regardless of other job characteristics (Hu & Hirsh, 2017). Rewards and meaning in work have been studied through Vroom's expectancy theory, so employees define the value of rewards, which could explain the disagreement of the above results (Akgunduz et al., 2020). Researchers have also determined that symbolic incentives for workers with low meaning in work provided the most substantial productivity increase, but only a slight increase among workers with high meaning in work (Kosfeld et al., 2017). Monetary rewards moderately increased productivity for respondents in the low- and high meaning in work categories (Kosfeld et al., 2017). Symbolic rewards decreased turnover intentions among teachers (Heleno et al., 2018) but had no impact on meaning in work among financial consultants (Akgunduz et al., 2020).

Employees with high meaning in work also exhibited more desirable work behaviors (Lavy & Naama-Ghanayim, 2020; Steger et al., 2012). Work-role fit and job tasks' significance were powerful predictors of meaning in work (Schnell et al., 2013). Rosso et al. (2010) theorized that job tasks could coincide with organizational culture factors, but seminal research on meaning in work has supported employees' perceptions of job tasks contributing to others' lives as an independent factor (Hackman & Oldham, 1975, 1980). Task significant and socio-moral climate have a moderate relationship, with

a less powerful but significant relationship between work-role fit and socio-moral climate (Schnell et al., 2013), aligned with seminal meaning in work proposals (Hackman & Oldham, 1976, 1980).

Assessing these organizational culture factors through job embeddedness, employees' fit, links, and sacrifices emerge. Job crafting and autonomy constitute fit and sacrifices; relationships with coworkers and clients/students represent links and sacrifices, and rewards are sacrifices. The above literature also suggests an association between meaning in work and job embeddedness, as organizational culture, meaning in work, and turnover intentions have significant correlations (Heleno et al., 2018; Fouché et al., 2017).

Meaning in Work and Job Tasks

Employees' connections with their job tasks tended to increase their meaning in work, such that employees who perceive an intrinsic value to their work are more likely to have higher perceptions of meaning in work (Sun et al., 2019). Job tasks and transcendence/ spirituality share some factors, as employees subjectively define job task value through spiritual aspects (Rosso et al., 2010; Steger et al., 2012). For example, teachers who perceive their work only as the transmission of knowledge tend to have lower meaning in work than teachers who perceive their job as the transformation of another (Heleno et al., 2018). Students of teachers with high meaning in work were more likely to feel their teachers care for them (Lavy & Naama-Ghanayim, 2020). This outcome suggests a cyclical relationship between meaning in work and performance, such that higher meaning in work increases effectiveness. Meaning in work fully

mediated the relationship between social mission perceptions and turnover intentions, prompting researchers to conclude that respondents' assigned personal work meaning was the preeminent turnover intention factor (Sun et al., 2019).

Finding meaning in job tasks may also buffer detrimental work experiences (Lamothe & Guay, 2017). Some healthcare professionals who had experienced workplace violence reported their work helped their psychological recovery, as they focused on caretaking as a method of coping (Lamothe & Guay, 2017). Several respondents shared that they felt sustained satisfaction after workplace violence because they contributed to others' lives and maintained their sense of accomplishment (Lamothe & Guay, 2017). Women who had been victims of military sexual assault also reported they found expanded meaning in their military service as they recovered from their assaults by becoming advocates and supports to other survivors of military sexual assault (Hannagan, 2017). These reports allude to meaning in work as a facilitator of posttraumatic growth. HSPs working with trauma and torture victims experienced secondary posttraumatic growth when they witnessed their clients' posttraumatic growth (Cohen & Collens, 2013), as professional meaning-making enabled positive outcomes (Barrington & Shakespeare-Finch, 2013).

Meaning in Work, Transcendence, and Spirituality

Transcendent factors like calling or spiritual experiences are frequent variables studied in conjunction with meaning in work (Fouché et al., 2017; Rosso et al., 2010; Steger et al., 2012). Rosso et al. (2010) heavily incorporated spiritual factors into their meaning in work conceptualization, theorizing that calling moderated expectations of

financial rewards through the fulfillment of personal values. They also criticized a lack of literature addressing spirituality as a driver of meaning in work, drawing on Calvinist and Lutheran ideals of one's profession as their mission. Milliman et al. (2017) acknowledged the shortage of professional spirituality research, supporting Rosso et al.'s assertions that meaningful work and spirituality are highly linked and require more research and practice consideration.

Several researchers have proposed transcendent factors as powerful meaning in work contributors (Schnell et al., 2013; Steger et al., 2012). Transcendent meaning in work models have highlighted personal definitions of purpose (Schnell et al., 2013), greater good (Steger et al., 2012), positive meaning (Steger et al., 2012), and meaning-making (Steger et al., 2012). Transcendent factors have been associated with higher meaning in work and lower work stress (Fouché et al., 2017; Schnell et al., 2013). An absence of calling has directly predicted turnover intentions, while high calling reduced burnout (Fouché et al., 2017). Self-efficacy, work-role fit, task significance, socio-moral climate, and self-transcendent orientation explained 46% of the variance of professionals' meaning in work in a model examining self-transcendence and meaning in work (Schnell et al., 2013). High meaning in work also has been shown to increase satisfaction and well-being and reduced distress (Steger et al., 2012). These factors support Lips-Wiersma and Wright's (2012) self/others and being/doing spectrums of job embeddedness, capturing the relevance of spiritual or transcendent components of people's job perceptions.

Hope

Historical perspectives of hope assume that people are goal-oriented and that hope is a dynamic attribute (Snyder et al., 1991). The agency and pathways components are positively related, reciprocal, and additive (Snyder, 2002; Snyder et al., 1991). Hope diverges from other positive psychology aspects, like self-efficacy and optimism, in hope's global, transferable, action-oriented states (Snyder, 1995; Snyder et al., 1991). Like meaning in work, some researchers have theorized hope as a transcendent characteristic (Bangura, 2016; Browning et al., 2019; Havel, 2004) that is transferable in relationships (Bishop & Willis, 2014; Flesaker & Larsen, 2010).

Hope Theory

Snyder et al. (1991) described hope as a two-factor construct explaining human motivations, beliefs, and behaviors, eschewing the colloquial emotionality of the term. A person's ability to conceive multiple solutions to problems or routes around barriers (e.g., pathways thinking) and belief in their ability to persist and achieve (e.g., agentic thinking) comprise hope (Snyder et al., 1991). Hope has been researched as a protective factor against STS (Passmore et al., 2020), a reason people leave their jobs (Mobley et al., 1979). Hope is also a key characteristic among HSPs that enables optimism in the face of clients' struggles and grief (Browning et al., 2019; Flesaker & Larsen, 2010; Stuart et al., 2019; Zgheib, 2019). However, Havel (2004) argued that hope is a spiritual factor, driving people to strive for good even when success is impossible. Though Havel's approach, on its surface, defies hope as a motivational factor, his willingness to identify smaller goals, like taking a stand for decency and good, reflects Snyder et al.'s

conceptualization of hope. Eger (2020, p. 6) acknowledged the dual components of hope but practically redefined them as "the awareness that suffering, however terrible, is temporary; and the curiosity to discover what happens next." Eger and Havel both write from perspectives of overcoming, as Eger had been detained in Auschwitz and Havel had fought to challenge tyranny, lending a compelling connotation to their definitions' air of transcendence.

Importance of Hope

A central theme in hope research has been the necessity of hope (Beck et al., 1974; Bishop & Willis, 2014; Flesaker & Larsen, 2010). Respondents have described hope as a sustaining factor that helps push people forward in the face of challenges (Flesaker & Larsen, 2010). Hope spurs people toward action (e.g., agency) through a powerful need rather than toward a directed outcome, inciting people to act even when the outcome will fail (Havel, 2004). Thus, the action is directed not toward success but the value of the effort. In the two-factor hope construct of the will and way, both the pathways and agency are required for people to progress (Snyder et al., 1991). Absent hope, people wilt because they stop making progress (Snyder et al., 1991).

Hopelessness has been a prominent risk factor in suicide risk assessments (Beck et al., 1974; Grewal & Porter, 2007; Weishaar & Beck, 1992), demonstrating the overt power of hope or hopelessness to direct a person's actions. A person's hopefulness could mitigate suicidal behavior in depressed individuals with suicidal ideation, while hopelessness augmented suicidal risk (Beck et al., 1974; Grewal & Porter, 2007; Snyder et al., 2014). Hopelessness scores have been reliably predictive of suicide attempts up to

4-6 years post assessment (Klonsky et al., 2012) though spiritual interventions can increase hopefulness and reduce suicide risk (Heidari et al., 2019). The reliability of the relationship between hopelessness and suicidal risk demonstrates the depth of hope in human beings: as a person loses their belief in a better future, their will to live also wanes.

Suicide risk researchers analyzed mental health providers' emotional responses to suicidal clients and reported that clinicians' hope for clients correlated with high affiliation (Barzilay et al., 2018). Clinicians' sense of hopelessness for a better future for their clients was the most powerful suicidal risk prediction tool (Barzilay et al., 2018). These results complement the above description of suicide-related hope research, as these results provide the socially holistic power of hope between helping professionals and clients.

Hope in Helping Relationships

Snyder (1995) had previously proposed hope as a crucial resource for professional helpers in his conceptualization of hope. Other researchers have emphasized the necessity of hope in professional helping relationships (Flesaker and Larsen, 2010; Zgheib, 2019). Parole officers assisting female convicts with reentry described the transmission of hope from themselves to their parolees, wherein hope is a resource parolees may borrow throughout the reentry process when they cannot find it for themselves (Flesaker & Larsen, 2010). Zgheib (2019, p. 5) stated that "the biggest healing power that we have as physicians is to give hope to our patients" while serving in a Beirut hospital for several weeks without departure due to constant siege.

Hope among helping professionals who routinely encounter death poses a particularly interesting juncture. Families of terminally ill children, guided by hospital staff encouraging them to explore avenues of hope unrelated to a cure, exhibited higher acceptance and lower distress when they embraced hope for restoration and healing in the child's death than those who did not (Stuart et al., 2019). Shiri et al. (2020) compared hope among rehabilitation professionals to hospice professionals. Hospice workers have reported higher hope, work engagement, and meaning in life than rehabilitation workers (Shiri et al., 2020). The researchers posited that hope was a summative protective factor against compassion fatigue and burnout (Shiri et al., 2020). Helping professionals who had higher hope were less likely to report STS (Browning et al., 2019; Passmore et al., 2020), less burnout (Browning et al., 2019; Passmore et al., 2020), higher meaning in work (Passmore et al., 2020), and higher compassion satisfaction (Browning et al., 2019). Clinicians with high client affiliation and hope have also expressed lower state anxiety and anger (Barzilay et al., 2018).

Though researchers have begun to quantify how hope protects professionals from professional stress (Browning et al., 2019; Passmore et al., 2020; Shiri et al., 2020; Stuart et al., 2019) and improves perceptions of client care (Flesaker & Larsen, 2010; Zgheib, 2019), hope has not emerged as a prolific variable among research studies. These limited findings warrant further examination of helping professionals' hope.

Turnover Intentions

As human services job opportunities balloon, there is a growing gap between the number of willing, qualified employees and available opportunities (Citino et al., 2017;

Lisinski, 2019). Turnover intentions denote an employee's consideration of leaving their post (Dahling & Librizzi, 2015) though turnover intent does not necessarily lead to voluntary departure (Abid & Butt, 2017; Sundram et al., 2018). Sun et al. (2019) reported that meaning in work reduced turnover intentions even when employees perceived their job's low social mission. As Mobley (1977) asserted, people generally weigh, fantasize about, or plan to leave their jobs before they depart. Mobley (1977) theorized that most people follow a linear pathway from initial turnover thought to actual voluntary turnover. However, turnover intention (e.g., "I will leave my job") is not highly predictive of actual voluntary turnover (Abid & Butt, 2017; Bothma & Roodt, 2013; Fukui et al., 2019). This section will explore literature about turnover intentions among HSPs, highlighting factors identified as contributors to or buffers against helping professionals' desires to leave their jobs.

History of Turnover Research

Researchers began exploring turnover intentions in the late 1970s, led by theorist William Mobley. Mobley reconceptualized turnover intentions several times through his research partnerships, which are reviewed in the Turnover Intentions portion of this chapter. Investigators quickly incorporated job satisfaction into the turnover intention research, and subsequent research focused on practical factors like job performance (Spencer et al., 1981) or job alternatives (Arnold & Feldman, 1982), or risk factors like job stress (Wunder et al., 1982). In the mid-1990s, researchers began assessing psychological factors like attachment style (Harris et al., 1993) and ethical fit (Sims & Kroeck, 1994). Job stress has remained a frequent variable in the turnover intention

literature through the intervening years, refining gaps in demographics, job role, and location (Kim & Kao, 2014; He et al., 2020). Several researchers have reported that hopeful employees have lower turnover intentions (Avey et al., 2009; Yavas et al., 2013). Meaning in work emerged as a variable in 2015 with a stable relationship (Janik & Rothmann, 2015).

Actual Turnover Among HSPs

Quantifying actual turnover among HSPs and at human-serving organizations starkly illustrates the chronic turnover woes. In 2019, human services advocates warned Massachusetts legislators that human-serving organizations across the state had between 25-40% of job positions open (Lisinski, 2019), while 72% of providers reported difficulty filling jobs (Citino et al., 2017). Staffing is a persistent challenge across the U.S. human services field, as the BLS (2020) reported turnover in the nongovernmental education and health services sectors persistently above 31% from 2015-2019. Actual turnover was consistently higher in the healthcare and social assistance fields than in education (BLS, 2020). I located limited data on actual turnover in the human services field, especially regarding actual turnover in crisis fields.

Mental Health Professionals' Turnover. Three different mental health providers' samples demonstrated a 26% annual turnover rate (Bukach et al., 2017; Fukui et al., 2020; Fukui et al., 2019). Two thirds of former employees of Ohioan mental health organizations left their companies voluntarily, 6% earned promotions, 4% made a lateral move, and 24% left involuntarily (Bukach et al., 2017). Among eleven dual diagnosis treatment teams, two teams experienced no turnover, two experienced 7% turnover, three

ranged from 44-46%, and two were between 62-67% (Woltmann & Whitley, 2007). Two teams had more than 100% turnover during the study period (Woltmann & Whitley, 2007). Turnover intention only directly explained 12% of actual turnover in a sample of Midwest community mental health providers (Fukui et al., 2019).

Nurses' Turnover. Actual annual turnover among nurses has been less consistent than those of mental health professionals, ranging from under 10% (Park and Ko, 2020) to 44.3% (Duffield et al., 2014). There was relative consistency in Australian nursing turnover rates across regions, ranging from 12.6% to 16.7% (Roche et al., 2015). About 30% of U.S. nurses leave the field within their first year, worsening a nursing staff crisis in which more open nursing jobs exist than nursing students graduate to fill them (Bong, 2019). Mobley et al.'s (1978) seminal investigation of turnover intention and actual turnover measured turnover among hospital employees at 10.3% in 47 weeks.

Teachers' Turnover. From 2015-2019, the turnover rate among state and local education sectors ranged from 17.1-18.5% (BLS, 2020). That rate was consistently much less than nongovernmental education, ranging from 29.1-30.4% actual annual turnover for the same period (BLS, 2020). Researchers have demonstrated an escalating risk of teacher turnover during their first five years, with the likelihood that a teacher left their school more than doubling from their second year to their fifth (Kim, 2019a). The probability that they left the profession nearly tripled from 8% to 22% during the same period (Kim, 2019). However, the National Education Association (Long, 2015) argued that teacher turnover rates had been overestimated in prior reports, citing a 17% turnover rate within the first five years of taking a position.

Professional Distress Driving Turnover Intentions

The intensity of distress a human services professional feels can increase their desire to leave their job (Agyapong et al., 2015; Chen et al., 2019; Christian-Brandt et al., 2020; McDermid et al., 2020; Merchant & Whiting, 2015). Researchers assessing turnover intentions across the human services field have identified barriers to retention intentions, including the risk of emotional and physical harm (Agyapong et al., 2015; Lamothe & Guay, 2017; McDermid et al., 2020; Woudstra et al., 2018), unsatisfactory wages (Agyapong et al., 2015; Bukach et al., 2017), and emotional exhaustion (Califf & Brooks, 2020; Christian-Brandt et al., 2020; Fukui et al., 2020). Regardless of the human-serving job role, higher professional stress and distress increased employees' thoughts of leaving their jobs, as robust research examined in this section will demonstrate.

Turnover and Stress Among Mental Health Workers. Mental health professionals report that their job risks and stressors increase their turnover intentions (Agyapong et al., 2015). High emotional exhaustion, high work-life conflict, and low job satisfaction have contributed to mental health professionals' distress driving turnover intentions include high (Fukui et al., 2020). Lack of support, lack of respect and recognition from managers, and poor working conditions—including low wages and unsatisfactory professional interpersonal relationships—increase turnover intentions (Agyapong et al., 2015). Some highly integrated treatment teams experienced sudden mass departures, which the researchers theorized stemmed from the increased workload and stress on remaining workers, with teams with abrupt turnover expressing pervasive and near-complete discontent (Woltmann & Whitley, 2007). Low client goal alignment

had the highest odds of driving actual turnover among community mental health providers (Fukui et al., 2019). High emotional tax among volunteer helpline workers increased turnover intentions except in cases where volunteers experienced debriefing, feedback, and positive engagement with supervisors (Sundram et al., 2018). Stressful caseload, low support, unmet expectations, and pay incommensurate to workload increased turnover intentions among mental health workers (Cosgrave et al., 2015).

Of mental health providers who voluntarily left their posts, 63% left because their position was not a suitable fit, 61% went back to school, 48% due to inadequate pay, 24% because of problems with supervisors, and 20% left because the work was too physically demanding (Bukach et al., 2017). The voluntary turnover rate was higher among larger organizations, and advancement opportunities increased turnover (Bukach et al., 2017), aligning with Mobley's (1977) turnover theory. Cosgrave et al. (2015), Agyapong et al. (2015), and Bukach et al.'s (2017) reports of leavers citing inadequate pay as a reason for leaving also reinforce Lisinski's (2019) assertion that human-serving organizations struggle to hire and retain an adequate workforce due to insufficient wages. HSPs at nongovernmental human services organizations often leave for state or private sector jobs because they get better pay and benefits, leaving a constant gap at NGOs (Citino et al., 2017).

Turnover and Stress Among Intimate Partner Violence Staff. Domestic violence shelter advocates echoed the concerns of mental health professionals (Merchant & Whiting, 2015). Shelters with low support cultures coincided with shelters with high turnover (Merchant & Whiting, 2015). Low support increased staff frustration, causing a

desire to leave the field or move up in the professional ranks to make macro-level changes (Merchant & Whiting, 2015). High work stress was a significant factor contributing to voluntary turnover among social services employees serving intimate partner violence victims (Steinheider et al., 2020). Positive organizational culture reduced turnover intentions (Merchant & Whiting, 2015; Steinheider et al., 2020).

Turnover and Stress Among Healthcare Professionals. Searches regarding how professional distress drives turnover intentions among healthcare professionals yielded robust results with consistent outcomes: preventing and alleviating professional distress through positive supervision and organizational culture reduces the likelihood that a person will consider leaving their job (Chen et al., 2019; Cheval et al., 2019; McDermid et al., 2020). Violence against medical staff and critical incidents impose acute stress, provoking employees to question whether they want to remain in their position or the medical field (Lamothe & Guay, 2017; McDermid et al., 2020; Wilson et al., 2018). When an employee feels abandoned, unsupported, or unprotected by their coworkers and organization (e.g., unsatisfactory culture), medical professionals are more prone to consider leaving their jobs (Bong, 2019; McDermid et al., 2020). Negative culture pronounces the deleterious effects of violence and critical incidents on medical staff, thereby intensifying turnover intentions (Lamothe & Guay, 2017; McDermid et al., 2020).

Meaning in work via affective, normative, and continuance professional commitment can decrease turnover intentions among nurses (Chang et al., 2019). Medical professionals with more intense regrets also had higher turnover intentions, and within-

person differences demonstrated that professional regret directly fluctuated with turnover intentions across time (Cheval et al., 2019). Medical professionals' regrets reduced their job satisfaction but did not directly relate to turnover intentions (Cheval et al., 2019). Medical professionals with problem-focused coping strategies fared better in job satisfaction than those who employed emotion-focused coping strategies (Cheval et al., 2019). Burnout positively correlates to turnover intentions in primary care practitioners, but job satisfaction negatively correlates with turnover intentions and mediates burnout's influence on turnover intentions (Chen et al., 2019). Pediatric nurses' moral distress, or their distress over knowing an ethical course of action but not doing it because of institutional constraints, increases burnout and turnover intentions among new graduates (Bong, 2019).

Stress and Turnover Among Teachers. Educators' professional distress heightens turnover intentions similar to other human services professions (Schaack et al., 2020). Researchers have paid particular attention to how organizational culture protects teachers' psychological wellness (Ryan et al., 2017; Wang & Hall, 2019) and how teachers' continuance commitment coincides with positive culture perceptions as buffers against turnover intention (Meyer et al., 2019). Teachers' burnout and job dissatisfaction also correlate with turnover intentions (Califf & Brooks, 2020; Christian-Brandt et al., 2020; Fouché et al., 2017; Park & Johnson, 2019) in similar patterns to other human-serving fields (Bong, 2019; Chen et al., 2019). Teachers with high pathological distress, like depression and anxiety, also reported higher job strain and turnover intentions (Husain et al., 2016). Male teachers were almost twice as likely to report intent to leave

their jobs than female teachers and had higher depression and anxiety scores (Husain et al., 2016).

Stress and Turnover Among Child Welfare Professionals. Turnover and intent to leave among child welfare workers is a widely researched topic with expressed concerns for service delivery, difficulties in establishing and maintaining best practices, and threats to organizational culture as unwanted side effects of turnover (Kim & Kao, 2014). Researchers have argued that the high turnover rate in child welfare becomes a burden unto itself (Chung and Choo, 2019) in patterns similar to those among mental health providers (Woltmann & Whitley, 2007). Positive organizational culture can mediate job stress's impact on child welfare workers' turnover intentions, especially through empowering supervisory practices (Bowman, 2019; Park & Pierce, 2020). Child welfare supervisors have also expressed that workload and lack of administration support increase their turnover intentions (Griffiths et al., 2020a), demonstrating a multilevel pattern of how organizational practices affect intent to leave. Child welfare workers whose supervisors employ inflexible, administrative-focused managerial methods tend to have higher turnover intentions (Bowman, 2019). Researchers have recommended increasing and improving supervisors' training, particularly encouraging child welfare supervisors to use value-focused practices that more readily align with healthful attachment styles (Bowman, 2019; Park & Pierce, 2020).

Meaning in Work and Turnover Intentions

Researchers have been examining emotional factors affecting employees' intentions to leave or remain in their jobs for decades (Miller et al., 1979; Mobley, 1977;

Mobley et al., 1979), though turnover literature incorporating meaning in work has emerged within the past 5 years. The newness of the literature notwithstanding, researchers have consistently reported direct (Akgunduz et al., 2020; Fouché et al., 2017; Heleno et al., 2018; Vermooten et al., 2019) and indirect (Arnoux-Nicolas et al., 2016; Fouché et al., 2017; Leunissen et al., 2018; Sun et al., 2019; Vermooten et al., 2019) effects of meaning in work on turnover intentions. Indeed, I found no literature that showed nonsignificant or positive relationships between meaning in work and turnover intentions.

The strength of the relationship between meaning in work and turnover intention has been less stable than the relationship's nature. Correlations ranged from -.14 among financial services employees (Vermooten et al., 2019) to -.226 among hotel employees (Akgunduz et al., 2020) to -.50 among teachers (Fouché et al., 2017). Factors contributing to work meaning that protect against the intent to leave include organizational nostalgia (Leunissen et al., 2018), social mission (Sun et al., 2019), shared vision (Sun et al., 2019), and calling orientation (Fouché et al., 2017). Meaningful work also increased employee engagement with an indirect effect on turnover intention (Vermooten et al., 2019). Meaning in work has also moderated burnout (Leunissen et al., 2018; Passmore et al., 2020) and undesirable working conditions' effects (Arnoux-Nicolas et al., 2016) on turnover intentions.

The consistency of the meaning in the work/turnover intention relationship reinforces some of the job embeddedness factors (Lips-Wiersma & Wright, 2012), as meaning in work explains why people might want to stay in their jobs. Meaning in work

would be considered both fit and a sacrifice. When individuals identify high meaning in work because of their greater good and support for others, those other-serving relationships could also be considered links.

Summary and Conclusions

This literature review demonstrated a persistent trend between professional distress and turnover intentions, sourced from job task stressors and unfavorable organizational cultures. The degree to which human service professionals find meaning in their work can alleviate distress, thus reducing turnover intentions. Hope's ability to ease distress may also drive professionals through challenges, though there is limited quantitative research examining employees' hope. The consistent negative relationship between meaning in work and turnover intentions demonstrates the power of HSPs' sense of calling and work meaningfulness to help withstand distress and psycho-emotional disturbances. Yet, external factors like unsatisfactory wages, lack of supervisory support, and exposure to trauma (vicariously or directly) can nonetheless take a toll on HSPs.

Job embeddedness explains many of the intricacies of HSPs' workplace behaviors and turnover intentions. Job embeddedness employs a more dynamic, balanced theory of intention to stay than Mobley's Turnover Intention Theory, with turnover research bearing out the myriad factors people weigh in their decisions to stay or leave. Mobley's theory fails to consider factors like work-life balance (Fukui et al., 2020), health impairments (Converso et al., 2018), and job role identities that HSPs adopt (Furness et al., 2020) that shape their job commitment and how they perceive their professional fit. Further, as the research on trauma and distress people experience personally and

professionally has established, duress influences decision making. Being victimized on the job, for example, may incite an employee to assess their alignment with and commitment to their coworkers, organization, and clients (Asikainen et al., 2020; Lamothe and Guay, 2017; Hannagan, 2017; Woudstra et al., 2018). As with many of the reviewed factors, victimization alone cannot predict whether an employee will consider leaving or choose to leave their job. Even HSPs who decide to stay in their jobs may deploy negative coping skills that distance the professional from their clients, such as depersonalizing clients, choosing not to believe them, and accepting lessened caring (Lamothe & Guay, 2017; Laube-Morgan, 1992; Lee et al., 2017).

Finally, this literature review exposed gaps in research about HSPs' hope, how hope interacts with meaning in work and turnover intentions, a crisis HSPs' hope, meaning in work, and turnover intentions. I did not locate any studies that had examined hope's direct effect on turnover intentions, nor hope as a moderating variable in the meaning in work/turnover intention data. This review also demonstrated a gap in literature specifically concerned with HSPs who work in crisis environments, with many of the reviewed articles focused on education and non-emergent medical and mental healthcare. Chapter 3 will define a plan to address these gaps and add to the existing literature on established variable relationships.

Chapter 3: Research Method

Introduction

This cross-sectional quantitative study was conducted to assess the relationship between meaning in work, hope, and turnover intentions among crisis HSPs. The relationship between meaning in work and turnover intentions has been persistent (Akgunduz et al., 2020; Fouché et al., 2017; Heleno et al., 2018; Vermooten et al., 2019). Meaning in work and hope alleviate professional distress (Flesaker & Larsen, 2010; Lamothe & Guay, 2017; Shiri et al., 2020; Stuart et al., 2019; Sun et al., 2019), whereas distress increases turnover intentions among HSPs (Agyapong et al., 2015; Chen et al., 2019; Christian-Brandt et al., 2020; McDermid et al., 2020). Meanwhile, the rate of job departure among HSPs threatens to outgain job growth (BLS, 2020; Citino et al., 2017), limiting the provision of adequate, efficacious care to already vulnerable populations (Bong, 2019; Lisinski, 2019). In this chapter, I discuss the research design and rationale, methodology, data analysis, threats to validity, and ethical procedures.

Research Design and Rationale

I used a quantitative, cross-sectional, correlational research design to complete this study. Specifically, a moderating multiple regression analysis was used to assess whether hope moderates the established relationship between meaning in work and turnover intentions. Meaning in work (*X*) was an independent variable, hope (*M*) was the independent/moderating variable, and the dependent variable was turnover intentions (*Y*) for this study. Surveys were administered electronically to participants and then analyzed using multiple regression analysis.

The purpose of the surveys was to discover whether hope moderated the relationship between meaning in work and turnover intentions, not to examine actual behavior, beliefs, or experiences. Survey data can efficiently illuminate the magnitude and proliferation of respondents' perceptions and experiences, quantifying the problem rather than exploring its nature (Bailes & Nandakumar, 2020), yielding responses specific to the problem and research questions (Kelley-Quon, 2018). A cross-sectional design was the most appropriate selection for this study. This approach is cost- and time-efficient, has a low burden on participants due to no revisitation, and enables effective assumptions testing (Spector, 2019; Taris et al., 2021).

The established relationship between HSPs' meaning in work and turnover intentions provided a strong background for this research study (Akgunduz et al., 2020; Fouché et al., 2017; Vermooten et al., 2019). However, the relationship's strength has varied, researchers have not yet examined the relationship among crisis HSPs, and hope had not been evaluated as a moderating variable. Further, hope added a novel factor for future researchers to consider in the meaning in the work/turnover intentions relationship. The findings of this study may help develop turnover reduction guidelines in a field already hurting for willing personnel by expanding on existing turnover intention research.

Methodology

Population

The target population was HSPs who work in crisis environments. Per Yeager and Roberts (2015), crisis environments are those wherein professionals come in direct

contact with individuals or communities because of recent acute trauma or devolvement contributing to intense client disequilibrium. Potential respondents included child abuse investigators, disaster relief workers, psychiatric crisis and inpatient workers, CIT members, and pre-hospital or ED personnel. As noted in Chapter 2, I could not estimate the number of potential crisis workers in the United States because the BLS data do not distinguish many crisis workers from their noncrisis counterparts.

Sampling and Sampling Procedures

I used convenience and snowball sampling for this research study. Convenience sampling is a sampling method in which a researcher collects data from the most accessible people to the researcher (Zhao et al., 2021). Snowball sampling is a method in which a researcher encourages those who receive invitations to invite others to participate (Ungvarsky, 2020). Convenience and snowball sampling can provide cost- and time-efficient research procedures and sharing invitations on social media can draw a sizeable sample (Kriska et al., 2013). Snowball sampling via social media also has been a more effective sampling method than multisite recruitment (Leighton et al., 2021). Although convenience sampling may expedite the data collection process, the sample may not be generalizable (Wall Emerson, 2021). These methods also may not produce a representative sample because eligible people who do not use social media or do not belong to the professional groups where invitations are posted are unlikely to see the invitation (Leighton et al., 2021). Self-selection bias may compound the lack of generalizability (Wall Emerson, 2021). These concerns may threaten this study's external validity (Costanza et al., 2015).

I invited people to participate via postings on social media, including posting invitations to professional groups for crisis workers. The American Association of Suicidology also agreed to post my research invitation to their email listserv (Appendix K). I planned to share my surveys with the Walden Participant Pool if needed. Respondents must be paid for their human services crisis care (i.e., not volunteer), be 18 years of age, and have English reading proficiency. Respondents also had to be able to provide informed consent for their voluntary participation. I did not invite my coworkers to participate to limit ethical concerns.

I used G*Power to calculate the suggested sample size with the following guidelines: a .15 effect size, .05 alpha, .80 power, and three tested variables. I selected the statistical test as linear multiple regression: fixed model, r^2 increase, and power analysis type as *a priori*. G*Power recommended a sample size of 77.

Recruitment

Upon IRB approval, I posted research invitations to various social media platforms—namely, Facebook and LinkedIn, including CIT programs, crisis group careers, community emergency response team groups on LinkedIn, the Green Cross Academy of Traumatology group on Facebook, and my LinkedIn and Facebook pages. I also distributed the study invitation to the American Association of Suicidology listserv and via the CIT International newsletter. Respondents needed to affirm that they are currently employed as crisis-serving helping professionals before accessing the surveys to ensure all respondents met the inclusion criteria.

Data Collection

Research invitations linked to a web-based survey that respondents could visit to complete the informed consent (Appendix C) and complete the study surveys. This web-based survey included information about the study and the researcher, informed consent, demographic questions, and survey items. An email inviting participation contained the survey link, a brief description of the research purpose, and an estimated time to complete the survey. Acknowledgment of informed consent was required to progress to the survey portion. Upon completing the surveys, a closing screen thanked respondents for their participation.

Instrumentalization and Operationalization of Constructs

Demographics Form

Though respondents' demographics were not studied variables, I used demographic responses for the sample's descriptive statistics. The demographics section (Appendix D) asked respondents to voluntarily identify their age, gender, occupation, total years of service, years in their current position, education level, marital status, income, and whether they supervise other people through their crisis work. As described in the literature review, demographics have correlated with aspects of professional distress and buffered turnover intentions and behaviors.

Comprehensive Meaningful Work Scale

In this research study, I used CMWS (Lips-Wiersma and Wrights, 2012) to measure meaning in work (Appendix F). This variable was measured ordinally. Respondents answered 28 items using a 5-point Likert-type scale where 1 = *never/hardly*

ever and 5 = *always*. Respondents rated the frequency for the 28 items for their current workplace only. Questions 15–17 were reverse scored. The Cronbach's alpha was .92 and sustained .80 test-retest reliability at a 2-month interval (Lips-Wiersma & Wright, 2012). Although the CMWS contains seven subscales, I used the collapsed CMWS for this study. Higher scores on the CMWS indicate higher meaning in work. Initial scores ranged from 28–140 but were averaged to yield a mean between one and five. Because I used multiple regression, score ranges were not broken into categories. Lips-Wiersma permitted the use of the CMWS for this research study (Appendix E).

Adult Hope Scale

Respondents completed the AHS (Snyder et al., 1991) to measure their hopefulness (Appendix H). The AHS, initially called the hope scale and also known as the trait hope scale, is called the *future scale* during survey administration (Snyder et al., 2014). This variable was measured ordinally, where 1 was *definitely false* and 8 was *definitely true*. The AHS is a 12-item, 8-point Likert-type scale with four filler questions that do not count toward the total score. Of the eight remaining survey items, four items (2, 9, 10, and 12) are the agency subscale, and four (1, 4, 6, and 8) are the pathways subscale. Questions 3, 5, 7, and 11 are filler questions and were excluded from scoring. Subscale scores were not used for this study because the research questions do not separate the hope components. Mean scores for the collapsed scale were calculated to quantify respondents' hope. The collapsed scale's Cronbach's alpha has persistently been above .80 and therefore meets validity criteria (Bailey et al., 2007; Snyder, 1995; Snyder et al., 1991; Snyder et al., 2014). Snyder et al. (1991) did not delineate low, medium, or

high categories; because I used multiple regression, defined categories were unnecessary. The University of Kansas Psychology Department, where Snyder worked while building and validating this instrument, provided permission to use this scale (Appendix G).

Turnover Intention Scale

After completing the demographics section, respondents completed the TIS (Cohen, 1999) to assess respondents' thoughts and plans to leave their current job (Appendix J). I chose to put the TIS first because I did not want participants' responses to the meaning in work and hope scales to influence their TIS responses. This variable was measured ordinally. Mobley et al. (1979) defined turnover intentions as an employee's desire to leave their current position. Cohen's TIS expanded on Mobley et al.'s (1978) turnover intention measure by asking the same three questions about respondents' plans to leave their current job, organization, and occupation. Cohen's TIS assesses thought ("I think a lot about leaving the [organization, job, occupation]"), alternative-seeking ("I am actively searching for an alternative to the [organization, job, occupation]"), and planning ("As soon as it is possible, I will leave the [organization, job, occupation]"). The scale uses a 5-point Likert-type scale where 1 = *strongly agree* and 5 = *strongly disagree*.

Scores range from nine to 45 but were averaged to develop a mean score. Respondents with the lowest scores, therefore, have the lowest turnover intentions. Cohen did not define high boundaries for low, medium, or high turnover intentions; however, the lack of classification is inconsequential because I used regression instead of comparison of means. The Cronbach's alpha for organizational turnover intention was .94, job turnover intention was .89, and occupational turnover intention was .92 (Cohen,

1999). There is open access to use this survey for noncommercial use (Appendix I).

Table 1

Codes

Data analyses	Variable type	Variable name	Variable categories	Coding
Descriptive statistics	N/A	Age	Actual reported age	Actual age in years
		Gender	Male Female Nonbinary Prefer not to say (excluded from analyses)	0 1 2 99
		Occupation	Psychiatric crisis Psychiatric inpatient EMT/EMS ED provider Emergency response Domestic violence Child welfare Hospice care	0 1 2 3 4 5 6 7
		Years in HS	Actual reported years in HS	Actual reported years in HS
		Years in current position	Actual reported years in pos.	Actual reported years in pos.
		Education level	High school/GED Associate's Bachelor's Master's Terminal	0 1 2 3 4
		Marital status	Single Partnered Married Divorced Widowed	0 1 2 3 4
		Approx. income	Actual reported income	Actual reported income
		Supervise	No Yes	0 1
Bivariate regression	Independent	28 question meaning in work from CMWS (mean)	Actual mean	Actual mean
	Dependent	9 question turnover intention from TIS (mean)	Actual mean	Actual mean
Bivariate regression	Independent	6 question hope from AHS (mean)	Actual mean	Actual mean
	Dependent	TIS mean	Actual mean	Actual mean
Multiple regression with moderation	Independent	CMWS mean	Actual mean	Actual mean
	Moderator	AHS mean	Actual mean	Actual mean
	Dependent	TIS mean	Actual mean	Actual mean

Data Analysis Plan

Data Cleaning and Assumption Testing

I downloaded survey responses from Google Forms and loaded responses into the Statistical Package for the Social Sciences (SPSS) software program, version 27, to analyze the data. I first reviewed the data to identify and address missing data or data entry errors, including *z*-scoring missing variable data as Hayes (2021) prescribed. I tested the statistical assumptions based on scatterplots and descriptive statistics, including mean, median, and standard deviations. I also centered *X* (meaning in work) and *M* (hope) by subtracting the mean to avoid multicollinearity (MacKinnon, 2011). I also created an interaction variable of *X***M* to test the moderation effect. For this research, the statistical significance was determined as $p < .05$.

Research Question Data Analysis

To address the research questions and test the hypotheses, I conducted a multiple regression analysis with moderation to examine whether hope moderated the relationship between meaning in work and turnover intentions at a statistically significant level. In moderation analysis, *X* (meaning in work) would have an assumed relationship with *Y* (turnover intentions) at a statistically significant level (Baron & Kenny, 1986). Historical data has demonstrated that people high in meaning in work are likely to have lower turnover intentions (Akgunduz et al., 2020; Heleno et al., 2018; Leunissen et al., 2018). *X* and *M* (hope) were centered to avoid multicollinearity, which I subsequently used to develop a multicentered interaction viable of *X***M*. However, if *X* and *M* are too highly correlated, multicollinearity can limit outcomes of the multiple regression with

moderation analysis (Daoud, 2017; Diebold, 2013). If the relationship between *X and Y* goes to zero when *M* is entered, then the moderator would completely moderate the relationship (MacKinnon, 2011). This analysis also allowed for the evaluation of when *M* moderates the relationship between *X* and *Y* in the event that the moderation effect is not universal (MacKinnon, 2011). I assessed the variables using regression in two steps. First, I examined whether *X* (meaning in work) related to *Y* (turnover intentions at a statistically significant level. Then I entered *X, M* (hope), and the multicentered *X*M* interaction variable into the linear regression analysis. These steps test the assumption that *X* and *Y* would be related at a significant level and assess M's moderating effect on the *X/Y* relationship (Hayes, 2018).

Research Questions and Hypotheses

RQ1: What is the relationship between meaning in work and turnover intention among HSPs who work in crisis environments?

$H_0$1: There is no statistically significant relationship between meaning in work and turnover intentions among HSPs who work in crisis environments.

H_a1: There is a statistically significant relationship between meaning in work and turnover intention among HSPs who work in crisis environments.

RQ2: What is the relationship between hope and turnover intentions among HSPs who work in crisis environments?

$H_0$2: There is no statistically significant relationship between hope and turnover intentions among HSPs who work in crisis environments.

H_a2: There is a statistically significant relationship between hope and turnover intentions among HSPs who work in crisis environments.

RQ3: What is hope's moderating effect on the relationships of meaning in work and turnover intentions among HSPs who work in crisis environments?

$H_0 3$: Hope does not moderate the relationship between meaning in work and turnover intentions at a statistically significant level among HSPs who work in crisis environments.

$H_a 3$: Hope does moderate the relationship between meaning in work and turnover intentions at a statistically significant level among HSPs who work in crisis environments.

Threats to Validity

This research study quantitatively assessed intentions and perceptions in a non-randomized, non-experimental design. Since this study was delimited to intentions rather than actual behaviors, and I was not attempting to control the research environment through randomization and experimental design, this study's validity was limited both internally and externally (Woodman, 2014).

Internal Validity

I chose not to incorporate factors that have been related to turnover intentions into this research study's variables, like job satisfaction, supervisory factors, or demographics. These delimitations could have threatened this study's internal validity, as these could be confounding factors (Heleno et al., 2018; Lee et al., 2017; Wines et al., 2019). Additionally, this study did not assess or incorporate any intervention, falling beneath the

scientific gold standard of an experimental design (Woodman, 2014).

External Validity

This study did not use random sampling, threatening the generalizability of this study's results (Woodman, 2014). Voluntary response sampling is subject to amplified self-selection bias and is less scientifically sound than random or probability sampling models (Babbie, 2017). Nonprobability sampling results in lowered generalizability (Babbie, 2017), as there is an escalated risk of certain demographics responding more frequently than others (Cheung et al., 2017; Nield and Nordstrom, 2016). These researchers demonstrated the limited generalizability of voluntary response surveys, underscoring the caution that self-selection bias produces a less representative sample. Since this study was delimited to turnover intentions and did not assess actual turnover, these results cannot be generalized to actual turnover behaviors since high turnover intentions might not predict actual voluntary turnover (Bothma & Roodt, 2013; Fukui et al., 2019; Mobley et al., 1978).

Ethical Procedures and Considerations

This research study had minimal ethical concerns since I did not assess a vulnerable population or collect my workplace data. I did not gather names, dates of birth, or other identifiable data from research participants, nor did the survey tool collect Internet protocol addresses. All data will be stored in a password-protected external drive in a firebox safe in the researcher's home for five years as required by the Walden University IRB. After five years, the drive will be digitally wiped for disposal. There were no financial incentives associated with study participation. The web survey was

constructed such that participants had to acknowledge informed consent, including potential risks and hazards, before beginning the surveys. Participation was completely anonymous since participants did not provide identifiable information, nor were individual responses associated with respondents' demographics in the research results or conclusion section. All partner organizations were masked according to Walden's best practices guide.

Summary

I used a quantitative cross-sectional research design to assess whether hope moderates the relationship between meaning in work and turnover intentions among professionals who work in crisis environments. The convenience and snowball sample drew from individuals working in crisis environments who were invited to participate via social media or a professional listserv. Respondents completed a web-based survey on Google Forms and were not incentivized for their time and participation. All responses were anonymous, and data will be secured in accordance with Walden IRB expectations. At the close of the data collection period, I used multiple regression with moderation analysis to test the research hypotheses.

Chapter 4: Results

Introduction

The purpose of this quantitative cross-sectional research study was to examine the relationship between meaning in work and turnover intentions, hope and turnover intentions, and whether hope moderated the relationship between crisis workers' meaning in work and turnover intentions at a statistically significant level. This moderation analysis assessed whether the independent variables, meaning in work and hope, had a statistically significant relationship with the dependent variable, turnover intentions, and whether hope moderated the relationship between meaning in work and turnover intentions at a statistically significant level. In this chapter, I describe the study procedures and results, including variations from the study plan. The results include the sample population, variable means, determinations of multicollinearity, and results of the regression analyses in accordance with the research questions. The study results demonstrated a marked divergence from existing literature on the relationship between meaning in work and turnover intentions.

Data Collection

Upon official IRB approval on October 10, 2021, I contacted the American Association of Suicidology listserv moderator to share the approved research invitation according to the research procedures. I also shared the invitation to professional groups on social media, and I activated the survey link on the Google Form. A CIT group member suggested sharing the research invitation via the CIT International newsletter, which an administrator at CIT International approved pending IRB approval. On

November 8, 2021, the IRB approved a change of procedure to add CIT International as a research partner for distribution, and the approved research participation was shared with the editor for inclusion in their upcoming newsletter. CIT International had turnover at the position responsible for the newsletter and requested several weeks before sending a newsletter after approval. The survey links remained live until December 20, 2021, to accommodate newsletter recipients' participation, allotting 9 weeks for participation. I also occasionally reposted the survey invitations within professional groups on social media during this period.

A total of 136 people initiated the surveys. After reading the informed consent, one person declined to participate, and eight people did not meet the inclusion criteria. One hundred twenty-seven respondents responded to the demographics and survey instruments, exceeding the minimum recommended sample size of 77 respondents. Eleven respondents had missing data within the survey instruments and were excluded from the final sample. Therefore, the final sample size was 116 respondents who consented to participate, met the inclusion criteria, and had complete data on the survey instruments. G*Power had recommended the 77-respondent sample size based on a .15 effect size, .05 alpha, .80 power, and three tested variables using the linear multiple regression: fixed model, r^2 increase, and power analysis type as *a priori.* After the data collection period closure, I calculated the statistical power again using the same parameters and the *post hoc* option to assess the achieved power. The sample's outcome statistical power was .945 at the aforementioned parameters. At an increased .450 effect size, the statistical power increased to .999, demonstrating that the risk of a Type I error

for this sample was limited (Cohen, 1992). I thus proceeded to prescreening and analyzing the data.

Data Cleaning

I prescreened the data to identify possible outliers and evaluate data reliability using SPSS Version 27. Data were transformed according to the instrument directions. I used the SPSS analyze-descriptive statistics-explore function to assess outliers, normality, skewness, and kurtosis and generated descriptive and frequency tables. I also examined the instruments' internal consistency using the analyze scale reliability analysis, described in the results portion of this chapter.

I identified four outliers in the hope/turnover intentions relationship and one outlier in the meaning in work/turnover intentions relationship. The sole outlier on the meaning in work/turnover intention relationship was also an outlier on the hope/turnover intention relationship. I subsequently developed two distinct data sets: first, a data set that included all participants who had complete data on the survey instruments, and second, a data set that only included participants with complete data who were not identified outliers.

The outliers in the hope/turnover intentions regression were all at the lower tail of the plots, with three that were between 1.5 and three times interquartile range and one more than three times the interquartile range. The sole meaning in work/turnover intentions outlier was also the lowest point of that regression but less than three times the interquartile range. While the two plots denoted five outliers, one respondent was an identified outlier on both plots; only four total outlier respondents were identified. These

data points would be considered single construct and interesting outliers as there is no evidence these data points resulted from data entry errors and therefore represent points of value for interpreting data (Aguinis et al., 2013).

Results

Descriptive Statistics

The final data set, including the four outliers but excluding respondents with missing data, was used to summarize the characteristics of this sample (Table 2). This group predominantly identified as female (58.6%, $n = 68$), and 55.2% reported having supervisory duties as part of their crisis work ($n = 64$). Psychiatric crisis workers were the most represented occupation, accounting for 23.3% of the sample ($n = 27$). About half self-reported being married ($n = 57$), and respondents with a bachelor's degree accounted for over a third of the sample ($n = 43$).

Table 2

Descriptive Statistics of Nominal Data

Characteristics		n	Percent
Gender	Female	68	58.6%
	Male	44	37.9%
	Nonbinary	3	2.6%
Occupation	Child welfare worker	8	6.9%
	CIT/CERT	4	3.4%
	Crisis hotline	9	7.8%
	ED medical provider	13	11.2%
	Emergency response	17	14.7%
	EMT/EMS/paramedic	19	16.4%
	Hospice care	3	2.6%
	Other	11	9.5%
	Psychiatric crisis	27	23.3%
	Psychiatric inpatient	5	4.3%
Highest education	High school/GED	15	12.9%
	Associate's	19	16.4%
	Bachelor's	43	37.1%
	Master's	35	30.2%
	Terminal	4	3.4%
Supervise	Yes	64	44.8%
	No	52	55.2%
Marital status	Divorced	10	8.8%
	Married	57	50%
	Partnered	13	11.4%
	Single	33	28.9%
	Widowed	1	.9%

The mean age was 39.79 years, years in a human-serving field was 14, years in current position was 6.8, and the average income for this sample was $60,748USD (Table 3).

Table 3

Range, Mean, Median, and Standard Deviations of Descriptive Nominal Statistics

	N	Minimum	Maximum	Mean	Std. deviation
Age	112	19	68	39.79	12.85
Total years in human-serving field	115	1	50	14.14	11.56
Years in your current position	109	0	43	6.82	8.40
Income	108	15000	160000	60748.92	27814.24

As anticipated, removing the outliers produced slight mean differences between the data set that included all respondents who completed the survey and the final data set where outliers were excluded (Table 4). Because all the outliers existed at the lower end of responses, each mean increased slightly. The most notable mean increase was observed in the hope variable, accounting for a .14 change when the outliers were excluded. All outliers tended to follow the pattern, so those with exceptionally low meaning in work or hope also had low turnover intentions.

Table 4

Data Set Comparison of Means

	Turnover intentions	Meaning in work	Hope
Respondents with complete survey data	3.36	3.36	6.51
Complete data excluding outliers	3.40	3.38	6.65

The Cronbach's alpha for instrument reliability exposed three reliable scales from the tested data (Table 5). The AHS had the lowest alpha at .78, which is within the acceptable range of reliability (DeVellis, 2003). This alpha was slightly below a consistently established threshold of .80 among existing literature (Bailey et al., 2007; Snyder, 1995; Snyder et al., 1991; Snyder et al., 2014) but mirrored the alpha in more

recent literature assessing nurses' hope (Hu et al., 2022). The possible reasons for this result are explored throughout this chapter, as this sample's AHS responses were nonnormal at several assumptions. The CMWS and TIS both achieved highly reliable alphas among this sample, with the CMWS scoring .93 and Cohen's TIS scoring .95 (DeVellis, 2003). The CMWS aligns with the alpha determined by the survey creators (α = .92, Lips-Wiersma & Wright, 2012). The alpha among this data set for the TIS is higher than previously identified (α = .917, Cohen, 1999). The residuals of the CMWS and TIS showed some variance along the predicted line but tended to stay near the prediction line. In contrast, the residuals for the AHS strayed from the predicted probability plot line toward the center quartiles.

Table 5

Descriptive Statistics and Reliability Analysis of Meaning in Work, Hope, and Turnover Intentions

	Meaning in work	Hope	Turnover intentions
Mean	3.36	6.51	3.36
Std. Error	.057	.11	.11
SD	.62	.1.17	1.22
Minimum	1.43	1.50	1.0
Maximum	4.79	8.00	5.0
Skewness	-.12	-1.68	-.28
Kurtosis	.92	3.36	-1.13
Cronbach's alpha (α)	.93	.78	.95

Note. Percent values rounded to .00.

Assumption Testing

I then tested the assumptions for regression to determine whether the parameters for multiple regression and moderation were adequate to test the research hypotheses. This included testing for skewness, kurtosis, multicollinearity of the predictor variables,

normality of distribution, and homogeneity, as well as examining whether the independent variable (meaning in work) and dependent variable (turnover intentions) were related at a statistically significant level (Hayes, 2018). This assumption was specific to the moderation analysis, as the moderation analysis depends on the independent and dependent variables to be related at a statistically significant level to assess whether a moderating variable changes the nature of that relationship (Hayes, 2018). I examined the skewness and kurtosis for each of the variables (Table 6) to assess for normality. Meaning in work and turnover intentions both skewed slightly right but were within an acceptable range of ±1 (Gao et al., 2008), while hope was skewed very far to the right. Turnover intentions were more peaked, with kurtosis of -1.13. The data points for hope tended to be toward each tail, demonstrated by a kurtosis of 3.36.

Table 6

Range, Standard Deviation, Skewness, and Kurtosis of Variables, Outliers Included

	Minimum	Maximum	Std. deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. error	Statistic	Std. error
Turnover intentions	1	5	1.22	-.28	.23	-1.13	.45
Meaning in work	-1.93	1.43	.62	-.12	.23	.09	.45
Hope	-5.01	1.49	1.17	-1.68	.23	3.36	.45

Note. Values rounded to .00.

Due to this highly leptokurtic result, I assessed hope's kurtosis with the identified outliers removed (n = 112), bringing hope's kurtosis to an acceptable .55 (Table 7). This sizeable difference demonstrates that excluding the outliers may be more likely to meet

statistical assumptions for regression analysis. Removing the outliers also brought hope's skewness into an acceptable range at just outside ±1 (Gao et al., 2008).

Table 7

Range, Standard Deviation, Skewness, and Kurtosis of Variables, Outliers Excluded

	Minimum	Maximum	Std. deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. error	Statistic	Std. error
Turnover intentions	-2.40	1.60	1.22	-.33	.23	-1.09	.45
Meaning in work	-1.95	1.41	.62	-.16	.23	.14	.45
Hope	-2.78	1.35	.92	-1.07	.23	.55	.45

I used Pearson's correlation (Pearson's *r*) to assess the correlation between the independent variables, meaning in work (CenCMWS) and hope (CenAHS), and the dependent variable, turnover intentions. These results will be reported in the hypothesis testing portion of this chapter. The correlation between meaning in work and hope (r = .426, $p < .001$, Table 8) was within an acceptable level for multicollinearity, falling below .80 (Daoud, 2017; Kim, 2019b). The tolerance parameters were within acceptable ranges, with tolerance >.10 and the VIF <10, so the assumptions were met for low multicollinearity of the predictor variables (Becker et al., 2015).

Table 8

Correlation for Meaning in Work and Hope

Correlations

		CMWS values	AHS values
CMWS values	Pearson correlation	-	.426*
AHS values	Pearson correlation	.426*	-

*p < .001

I tested the assumptions of regression analysis prior to the hypothesis testing. This included testing for homoscedasticity and normality, using a visual assessment of a probability plot to examine whether observed and predicted values were normally distributed (Stevens, 2009). I also assessed the data for homoscedasticity to determine whether the data followed a central line of regression (Stevens, 2009). I used a standardized residual plot for this visual examination (Figure 2). The predicted and observed residuals trended along the predicting line without perfect adherence, demonstrating acceptable distribution to meet the regression assumption of normality. The histogram showed a normal distribution of turnover intentions' residuals, peaked centrally with a slightly unexpected increase in frequency toward the lower end.

Figure 2

Multiple Regression Normal Probability Plot (P-P)

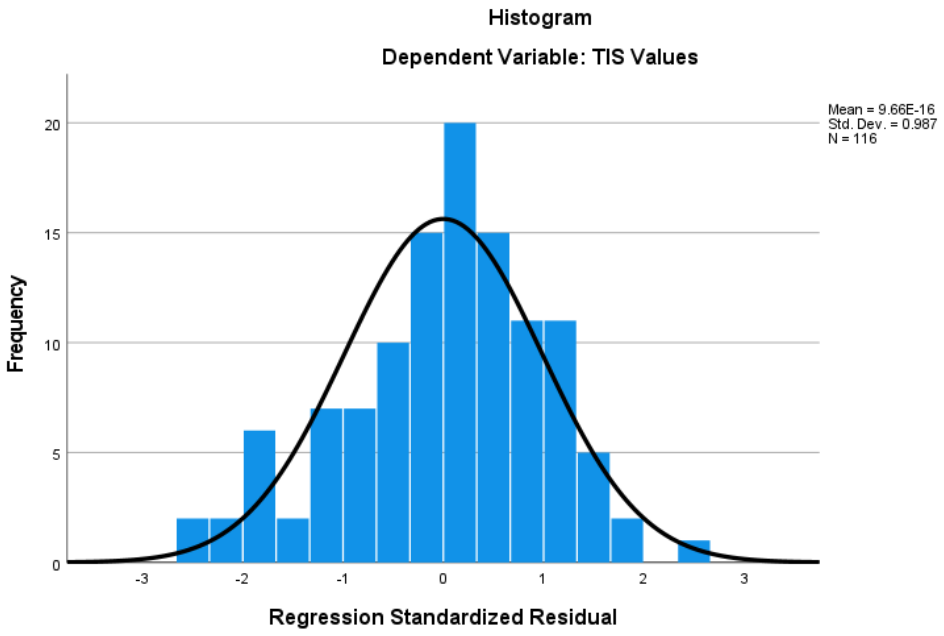
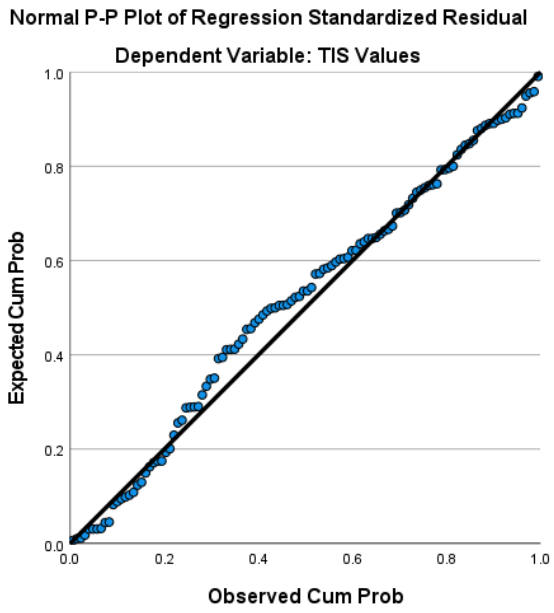


Figure 3

Normal P-P Plot of Regression: Standardized Residual



Hypothesis Testing

To test the research hypotheses, I conducted multiple regression analysis. I entered meaning in work into Step 1, hope into Step 2, the interaction variable into step three, and turnover intentions as the dependent variable. I then observed the r^2 or r^2 change and *p* from the regression model to examine the relationship between each predictor variable and turnover intentions.

Research Question 1

The null hypothesis for RQ1 was There is no statistically significant relationship between meaning in work and turnover intentions among HSPs who work in crisis environments. I examined the relationship and statistical significance between meaning in work as the predictor and turnover intentions as the dependent variable to assess RQ1 in a

stepwise linear regression analysis. I observed a statistically significant relationship (r^2 = .446, $p < .001$, Table 9) between the meaning in work and turnover intentions. Therefore, the null hypothesis is rejected and the alternative accepted. There is a statistically significant relationship between meaning in work and turnover intentions among HSPs who work in crisis environments.

Table 9

Model Summary for Multiple Regression with Moderation Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.668a	.446*	.442	.912	.446	91.94	1	114
2	.671b	.450	.441	.912	.004	.819	1	113
3	.674c	.454	.440	.913	.004	.757	1	112

* $p < .001$
a. Predictors: (Constant), CenCMWS
b. Predictors: (Constant), CenCMWS, CenAHS
c. Predictors: (Constant), CenCMWS, CenAHS, CenCMWSxCenAHS
d. Dependent Variable: TIS Values

The residuals' probability plot (Figure 4) and scatterplot (Figure 5) demonstrated a normal distribution with acceptable variance from the predicted values.

Figure 4

Meaning in Work/Turnover Intentions Normal Probability Plot (P-P)

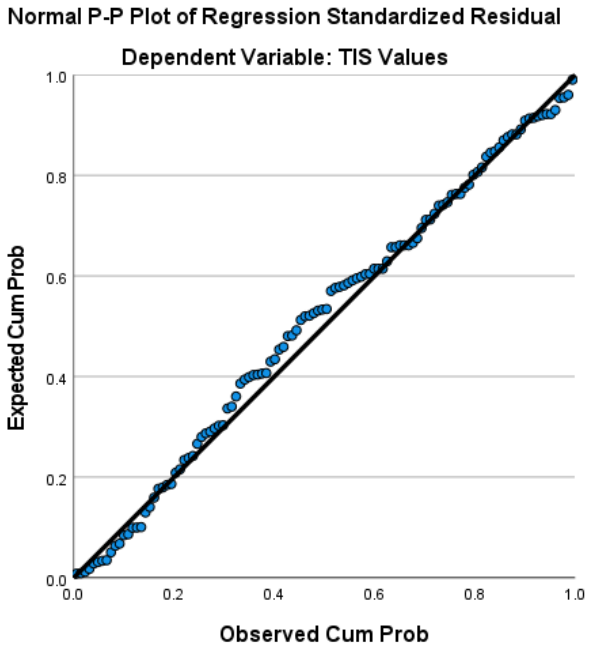
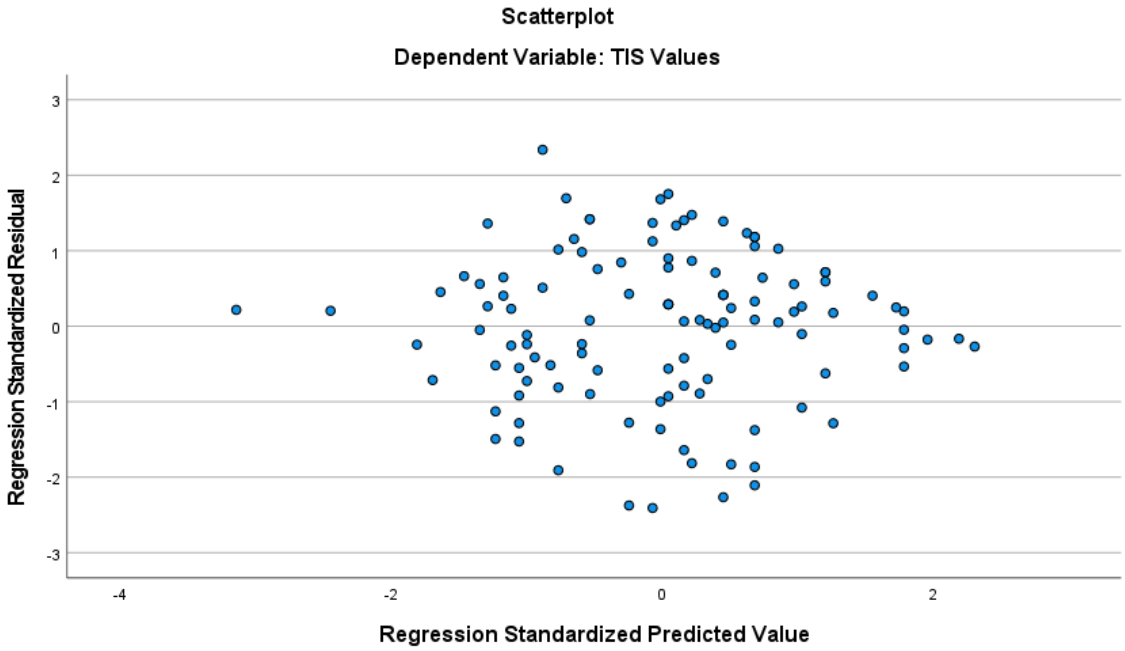


Figure 5

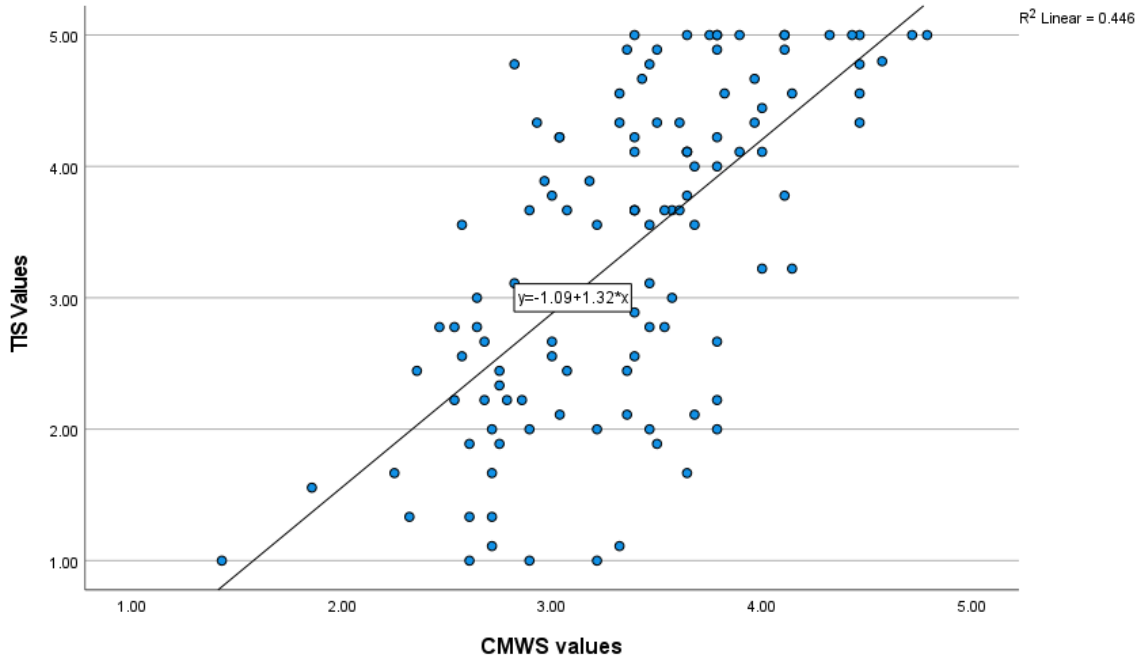
Meaning in Work/Turnover Intentions Residuals Scatterplot



To determine the directionality of the meaning in work/turnover intentions relationship, I examined a scatterplot of the relationship (Figure 5). I observed a positive relationship, such that respondents with higher meaning in work also tended to have higher turnover intentions. The statistical significance of this relationship also met the assumption that the independent and dependent variables would be related at a statistically significant level to test the moderation analysis (Hayes, 2018). I thus concluded that the assumptions were adequately met to proceed with a multiple regression analysis with moderation.

Figure 6

Meaning in Work/Turnover Intentions Scatterplot



Research Question 2

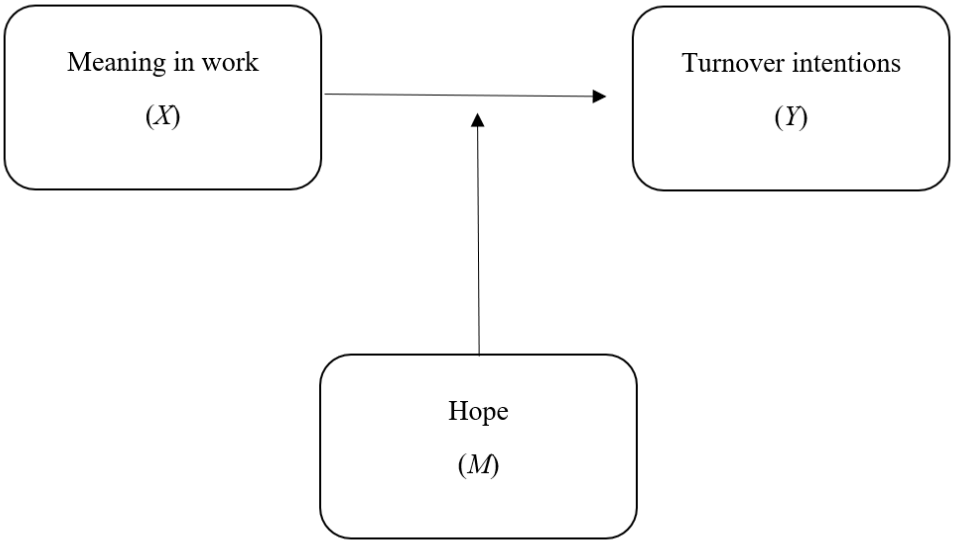
The null hypothesis for RQ2 was There is no statistically significant relationship between hope and turnover intentions among HSPs who work in crisis environments. I examined this relationship within the multiple regression analysis, assessing the r^2 change for the hope/turnover intentions related when accounting for meaning in work (Table 9). Hope accounted for an r^2 change of less than half a percentage point and did not have a statistically significant relationship with turnover intentions ($r^2 = .004$, $p = .367$). I concluded that hope did not relate to turnover intentions at a statistically significant level. Thus, I failed to reject the null hypothesis that hope and turnover intentions would not have a statistically significant relationship among HSPs who work in crisis environments.

Research Question 3

The null hypothesis for RQ3 was Hope does not moderate the relationship between meaning in work and turnover intentions at a statistically significant level among HSPs who work in crisis environments. The purpose of a moderation analysis is to discover whether and under what conditions the moderating variable changes the relationship between the independent variable and the dependent variable (Hayes & Rockwood, 2017). Moderation analysis can uncover nuances that depend on certain conditions of the independent variable's effect on the dependent variable (Prado et al., 2014). This research study assessed whether hope moderated the relationship between meaning in work and turnover intentions among crisis workers (Figure 7). Previous hypothesis testing demonstrated a strong, statistically significant relationship between meaning in work and turnover intentions, meeting a critical assumption for moderation. I also discovered a weak relationship between hope and turnover intentions that was not statistically significant. Both meaning in work and hope were positively related to turnover intentions and were not multicollinear.

Figure 7

Hypothesized Moderating Relationship



I tested the hypothesis to determine whether hope moderated the relationship between meaning in work and turnover intentions at a statistically significant level. I centered the predictors, meaning in work and hope, by subtracting the mean from the individual values (Hayes, 2018). I entered meaning in work into the first step of the multiple regression analysis, hope into the second, and then a multicentered interaction variable of centered meaning in work*centered hope into the third step. Turnover intentions were entered as the dependent variable. Table 10 shows the values associated with the centered variables, meaning in work (Centered CMWS), hope (Centered AHS) and the interaction term (Centered CMWS x Centered AHS).

Table 10

Predicted and Residual Values of Moderated Interaction

	Minimum	Maximum	Mean	Std. deviation
Predicted value	-1.975	1.533	.000	.671
Residual	-1.882	1.759	.000	.741
Std. predicted value	-2.944	2.284	.000	1.00
Std. residual	-2.517	2.353	.000	.991

Table 4.10 shows the results of the ANOVA for the regression model.

Table 11

ANOVA Results for the Interaction Between Meaning in Work and Hope on Turnover Intentions

	Sum of squares	df	Mean square	F
Regression	52.226	3	17.409	31.060*
Residual	62.774	112	.560	
Total	115.000	115		

* $p < .001$

The moderation analysis did not demonstrate that the interaction variable was related to turnover intentions at a statistically significant level, $r^2 = .004$. F(1,112) = 31.060, $p = .386$. Tables 9 and 12 show the results of the entire multiple regression with moderation analysis, demonstrating that the entire model was statistically significant ($p < .001$) but that the interaction variable was not.

Table 12

Moderated Regression Analysis with Centered Meaning in Work (CMWS) as IV, Hope (AHS) as Moderator, and Turnover Intentions as the Outcome Variable

	Unstandardized coefficients		Standardized coefficients	t
	B	Std. error	Beta	
(Constant)	.035	.080		.44
Centered CMWS	.665	.083	.665*	8.01
Centered AHS	.025	.093	.025	.26
Centered CMWS x Centered AHS	-.084	.096	-.074	-.87

* $p < .001$

As previously described, meaning in work accounted for moderate variance on turnover intentions at a statistically significant ($r^2 = .446$, $p < .001$), and hope accounted for a minimal amount of variance on turnover intentions at a non-statistically significant level ($r^2 = .004$, $p = .367$). The multicentered interaction term was not determined to have a statistically significant relationship with turnover intentions and less than a half a percentage point r^2 change ($r^2 = .004$, $p = .386$). Having observed that the moderating effect of crisis workers' hope on the meaning in work/turnover intentions relationship was weak and did not achieve statistical significance, I failed to reject the null hypothesis. I completed all data analyses and conducted no further analyses.

Summary

In this chapter, I described the steps taken to collect, transform, and analyze the research data according to the research plan. The survey sample was large enough to meet the minimum recommended sample size of 77 and allow for the removal of respondents with missing survey data and achieved strong statistical power for the regression analysis. The survey instruments produced acceptable Cronbach's alphas for

this data set. Tests of statistical assumptions determined four outliers in the sample, which I screened for assurances that they were not data entry errors. I concluded that these outliers were interesting by Aguinis et al.'s (2013) description, revealing information about those unique participants. Therefore, these outliers were included in the final sample.

I tested the hypothesis for each research question using a multiple regression analysis with moderation. Meaning in work had a statistically significant relationship with turnover intentions, so I rejected the null hypothesis that meaning in work would not correlate with turnover intentions at a statistically significant level. Hope did not have a statistically significant relationship with turnover intentions, so I failed to reject the null hypothesis that hope would not have a statistically significant relationship with turnover intentions. I tested the moderation analysis to determine whether hope moderated the relationship between meaning in work and turnover intentions at a statistically significant level. I observed a weak interaction effect of hope on the relationship between meaning in work and turnover intentions that was not statistically significant. Therefore, I failed to reject the null hypothesis that hope would moderate the relationship between meaning in work and turnover intentions of crisis workers at a statistically significant level. In Chapter 5, I will interpret the findings of these data analyses, explore the analyses with contextual details, and describe this study's possible implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative, cross-sectional study was to assess (RQ1) whether meaning in work would relate to turnover intentions at a statistically significant level, (RQ2) whether hope would relate to turnover intentions at a statistically significant level, and (RQ3) whether hope would moderate the relationship between crisis workers' meaning in work and turnover intentions at a statistically significant level. The relationship between crisis workers' meaning in work was statistically significant with a strong effect size. Meaning in work accounted for 44.6% of the variance in turnover intentions ($p < .001$), so I rejected the null hypothesis for RQ1 and accepted the alternate hypothesis. Hope did not relate to turnover intentions at a statistically significant level and accounted for a minimal increase in the r^2, so I retained the null hypothesis for RQ2. The interaction variable did not have a statistically significant relationship with turnover intentions either and had a very weak effect, so I also retained the null hypothesis for RQ3. Having observed a statistically significant but weak relationship between the predictor variables to assess multicollinearity, I propose that meaning in work and hope correlate to an extent with one another.

I included hope as a novel variable to the existing factors influencing turnover intentions to examine whether hope would buffer turnover intentions. However, respondents with higher hope also tended to have stronger thoughts about leaving their jobs in this sample; this relationship was not statistically significant when meaning in work was entered into the first step of the analysis and hope was entered into the second.

Interpretation of Findings

Meaning in Work and Turnover Intentions

For RQ1, I observed a statistically significant relationship between meaning in work and turnover intention regarding the first research question and rejected the null hypothesis. The relationship between meaning in work and turnover intentions was not in the anticipated direction, as respondents with higher meaning in work also tended to have higher turnover intentions. This positive relationship between meaning in work and turnover intentions diverged from the breadth of research that has persistently reported a statistically significant inverse relationship (Akgunduz et al., 2020; Fouché et al., 2017; Heleno et al., 2018; Vermooten et al., 2019).

Previous research on the meaning in work/turnover intention relationship has ranged from –.14 among financial services employees (Vermooten et al., 2019) to –.226 among hotel employees (Akgunduz et al., 2020) and –.50 among teachers (Fouché et al., 2017). The directionality of the relationship observed with this research (r^2 = .446) was nearly the opposite observed among teachers 5 years ago (Fouché et al., 2017). The samples with the strongest effect sizes were human-serving professionals, compared with weaker effect sizes for financial services or hospitality workers.

There are potential explanations for the different observed results between this study and existing literature on meaning in work and turnover intentions. In an era labeled the *Great Resignation* (Sheather & Slattery, 2021), this research study may have unintentionally captured a snapshot of how crisis workers see their job options among a greater societal shift toward mass job departures. This research was also unique in that

crisis workers were the target sample. The cross-sectional research design was not intended to capture longitudinal or comparative data but rather a moment in time about employees in crisis fields. Without literature on crisis workers from different times to compare, I cannot discern whether this unexpected result reflects the Great Resignation, the impacts of the COVID-19 pandemic, the field of crisis, or a combination of all three. Although I cannot conclude the causes for the positive relationship between meaning in work and turnover intention observed in this study, the high statistical significance and effect size demonstrate that, among this sample, meaning in work did not serve as a buffer to turnover intentions as observed in the existing literature.

Potential reasons for the unexpected directionality of the relationship between meaning in work and turnover intention may be explained by existing literature. Theorized constructs of meaning in work have envisioned meaning in work as a balanced compass (Lips-Wiersma & Wright, 2012; Rosso et al., 2010). Scholars have agreed that the balance of self and other in work amplifies meaning and have postulated that being/doing (Lips-Wiersma & Wright, 2012) or autonomy versus communion (Rosso et al., 2010) complete the balance with self/others. As the compass falls out of balance, employees might derive diminished meaning from their jobs (Lips-Wiersma & Wright, 2012). This research was conducted during the COVID-19 pandemic and examined workers who would have persistently been labeled *essential workers* and may have had expanded duties or greater demands foisted upon them to meet the demands associated with the pandemic (Gonzalez-Gil et al., 2021) as well as the effects of social distancing measures (Matulessy et al., 2021). Examining crisis workers' meaning in work and

turnover intentions under these conditions may have exposed the practical threats that an unbalanced compass can have on employees.

Hope and Turnover Intentions

Hope accounted for a weak amount of variance on turnover intentions and was not statistically significant. To determine whether the order of the predictor variables may have contributed to the regression outcome, I conducted a second multiple regression analysis entering hope into Step 1, meaning in work into Step 2, the interaction variable into Step 3, and turnover intentions as the dependent variable following guidance on stepwise regression variable selection (Desboulets, 2018). In the second regression model, hope accounted for some variance in turnover intentions at a statistically significant level ($r^2 = .117$, $p < .001$, 13) and meaning in work sustained a statistically significant relationship with turnover intentions at a weaker effect size when accounting for hope ($r^2 = .334$, $p < .001$). I excluded the interaction variable because it was not statistically in the third step of the previous regression and would have remained in the third step of this regression if it were included (Desboulets, 2018). A scatterplot of the hope/turnover intentions relationship also demonstrated a positive relationship (Figure 8), such that respondents with higher hope also tended to have higher turnover intentions.

Table 13

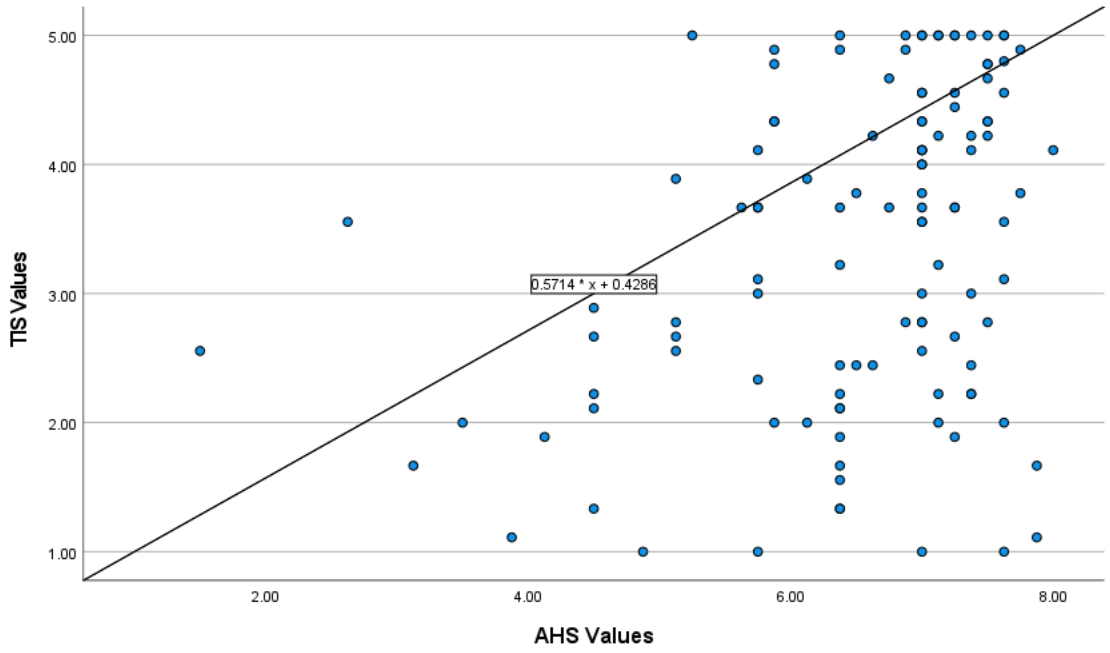
Model Summary of Multiple Regression, AHS in Step 1 and CMWS in Step 2

Model	R	R^2	Adjusted R^2	Std. error of the estimate	Change statistics				
					R^2 change	F change	df1	df2	Sig. F change
1	.342a	.117	.109	1.152	.117	15.069	1	114	<.001
2	.671b	.450	.441	.912	.334	68.614	1	113	<.001

a. Predictors: (Constant), AHS Values
b. Predictors: (Constant), AHS Values, CMWS values

Figure 8

Scatterplot of Hope/Turnover Intentions Relationship



I selected the AHS (Snyder et al., 1991) for this research study due to its extensive usage and validation. The AHS assesses global hope rather than state-specific hope, so respondents rated their global hope rather than hope within their crisis work environment. By evaluating global hope, I captured how respondents' hope affected their global intentions—in this case, consideration for leaving their jobs—rather than how

hope operationalizes in their job roles and responsibilities. Because hope was related to turnover intentions at a statistically significant level when entered into Step 1 of the regression but not when entered into Step 2, and because hope and meaning in work correlated at a statistically significant level, I postulate that global hope structurally precedes meaning in work as a transcendent, contributing factor.

I thought hope might operationalize as a buffer to leave a position because of a belief in the ability to effect change. I observed that hope did not have a statistically significant relationship with turnover intentions when entered into Step 2 but did account for a statistically significant variance in turnover intentions when entered into Step 1. I further observed a positive relationship between hope and turnover intentions, albeit with a weaker effect than observed between meaning in work and turnover intentions. Therefore, respondents with higher hope tended to have more turnover intentions in this sample. This outcome differs from existing literature in which hope negatively correlated with nurses' turnover intentions, using the same scale to measure hope but conducted more than six months before the emergence of the COVID-19 virus (Hu et al., 2022).

Hope's two factors—pathways and agency—may account for the positive nature of this relationship and align with Mobley et al.'s (1979) assertion that employees who believe they can find another job are more likely to entertain and pursue other opportunities. This effect was observed among community-based mental health providers, as providers who worked at organizations with more advancement opportunities were more likely to leave their positions (Bukach et al., 2017). I did not assess whether pathways or agentic thinking were more dominant predictors of turnover

intentions. Pathways thinking involves a person's ability to identify multiple possible solutions, while agentic thinking involves a person's belief that they can overcome and achieve (Snyder et al., 1991). Further analysis of the distinct pathways and agentic features could assess whether these factors accounted for the nonnormal distribution of the hope/turnover intentions relationship.

Theorists who tended to view hope as a transcendent factor that emerges, especially in times of distress and apparent defeat, have argued that hope imbues perseverance. Eger (2006, p. 6) envisioned hope as "the awareness that suffering, however terrible, is temporary; and the curiosity to discover what happens next." As conversations about fear of the future have become more prominent in the face of COVID-19 and other factors (Steele, 2020), employees have reported greater future career anxiety and depression from COVID-19 (Mahmud et al., 2020). Specifically, the fear of annihilation of self, paired with the fear of loss of loved ones, loss of love, and separation from loved ones, can have profound detriments on people's wellness (Steele, 2020).

Roughly 18 months into a global pandemic, perhaps crisis workers have translated their hope from perseverance in their current work environments elsewhere to diminish such fear of annihilation and control how temporary their current situation is while entertaining the curiosity for what comes next. Tragically, the alternatives when employees lose hope for more manageable alternatives have been borne out in the public eye as stories of emergency physician suicide since the pandemic began have surged to the forefront (Greenberg, 2022; Laboe et al., 2021), reinforcing the breadth of research

that has tied hopelessness to suicide risk (Beck et al., 1974; Grewal & Porter, 2007; Weishaar & Beck, 1992). I, therefore, posit that pathways thinking, or an individual's ability to identify multiple solutions to a problem, could have spurred crisis workers to explore alternative jobs rather than remain in a position that threatens their wellness to the severest levels.

Moderation of Hope on the Relationship Between Meaning in Work and Turnover Intentions

I examined whether crisis workers' hope would moderate the relationship between meaning in work and turnover intentions. I used a multiple regression with moderation analysis to evaluate the research questions. I did not observe statistically significant relationships between hope and turnover intentions, nor the interaction variable and turnover intentions. I also concluded that the outcome of the regression model was influenced only by the strength of the relationship between meaning in work and turnover intentions. Thus, I failed to reject the third null hypothesis and concluded that hope did not moderate the relationship between meaning in work and turnover intentions at a statistically significant level. The interaction variable was not statistically significant in either regression model regardless of the other variables' order.

The inclusion of hope as a moderating variable on the meaning in work/turnover intention relationship was a novel addition tested on a previously untested population. The unexpected directionality of the relationship between meaning in work and turnover intentions could have contributed to this outcome, as meaning in work emerged as a risk factor to turnover intentions instead of a protective factor as had been persistently

demonstrated in prior literature (Akgunduz et al., 2020; Fouché et al., 2017; Heleno et al., 2018; Vermooten et al., 2019). Furthermore, hope was nonnormally distributed and had a weak relationship with turnover intentions among this sample. In light of these factors, further research may assess whether hope would have a moderating effect on the relationship between meaning in work and turnover intentions among other populations and at different times.

Theoretical Foundation

I used the theory of job embeddedness to frame this research study, which seeks to explain why people choose to stay in their jobs (Mitchell et al., 2001). Mitchell and colleagues (2001) developed this theory as a dynamic view of employees' motivations to stay or leave based on their relationships (links), how much they identify with their organization, role, and tasks (fit), and what they stand to lose if they stay or go (sacrifices). The theory of job embeddedness tends to look toward protective factors against leave decisions (Yang et al., 2011), so I selected meaning in work as a previously consistent buffer against turnover and assessed hope as a novel protective factor.

Instead, this cross-sectional research study demonstrated that crisis workers with high meaning in work tended to have more substantial considerations to leave their jobs at a statistically significant level, as observed regarding the first research question. This result came amid the *Great resignation* (Sheather & Slattery, 2021) and 18 months into a pandemic that has disproportionately taxed crisis workers (Yeo et al., 2021). This snapshot of crisis workers' desire to leave their jobs despite finding high meaning is an unintended indicator of the present shifts in employee retention. Thus, this research

demonstrates that crisis workers who find high meaning in their work may need more incentives to prevent job turnover than deriving a sense of calling and contributing to the greater good have provided for other populations under different circumstances, reinforcing the balanced meaning in work compass conceptualization (Lips-Wiersma & Wright, 2012).

This result endorses the dynamics of the theory of job embeddedness by demonstrating that one vital protective factor would not perfectly withstand the risks associated with stressors, as illustrated by the compass conceptualization of meaning in work (Lips-Wiersma & Wright, 2012; Rosso et al., 2010). For example, the theory proposes that employees incorporate sacrifices into their stay/leave decisions—what they risk losing if they stay versus what they risk if they leave. As emerging literature quantifies the profound stress emergency personnel have experienced during the pandemic (Greenberg, 2022; Laboe et al., 2021; Yeo et al., 2021), turnover intentions (Falatah, 2021), and actual turnover (BLS, 2022b) have coincidingly increased.

The results of the hypothesis testing for RQ1 demonstrated that, rather than job meaningfulness acting as a buffer against thoughts of leaving a job, crisis workers with higher meaning in work had more desire to depart. Subsequent analysis of the relationship between hope and turnover intentions when hope was entered into Step 1 of the multiple regression analysis demonstrated that hope also did not act as a buffer to crisis workers considering leaving their jobs. The theory of job embeddedness would thus frame this dynamic as a tension in which personnel might consider other jobs that they perceive to have less stress to prevent sacrificing personal wellness if they remain in their

current roles.

I did not incorporate factors that have been previously linked to meaning in work and turnover intentions, such as job satisfaction (Mobley et al., 1979), job crafting ability (Heleno et al., 2018), and relationships with coworkers (Fouché et al., 2017), supervisors (Sundram et al., 2018), and clients (Woudstra et al., 2018). Since this study explored correlational relationships, not causation, and did not assess risk factors for turnover intentions, unassessed variables may confound these positive explanations of variance.

Furthermore, I assumed that the pandemic would not influence the study variables at the outset of this research study, but subsequent literature has demonstrated the contrary (Hu et al., 2022; Yeo et al., 2021). I also did not assess factors like professional quality of life (Browning et al., 2019), burnout (Leunissen et al., 2018; Passmore et al., 2020), and trauma responses (Passmore et al., 2020). While I delimited this study's variables due to the addition of hope as a novel variable and because the meaning of work/turnover intention relationship had not been assessed among crisis workers, my results capture only a portion of the theory's integrative perspective on stay/leave decisions since I used a cross-sectional research design (Spector, 2019; Taris et al., 2021) and did not incorporate more variables.

Limitations of the Study

Several factors limited this study. More than half of the respondents identified as having supervisory duties, which is higher than the estimated 44% of workers whom the BLS (2022a) classifies as supervisory/management. Since previous researchers have demonstrated different stressors triggering turnover intentions between supervisors and

nonsupervisors (Griffiths et al., 2020b; Lee et al., 2017) and I did not compare group means, these results could not be used to draw categorical conclusions.

Several research design elements, including sampling strategy and data analysis methods, may have limited this study. Self-selection bias can contribute to a polarized exposure of the dependent variable, turnover intentions (de Haan et al., 2015). The use of convenience sampling can limit the generalizability of the results as it is less likely to capture a representative sample (Wall Emerson, 2021). Additionally, the correlational design enabled the quantification of the concerns—in the case of these results, high turnover intentions coinciding with high meaning in work and hope—but cannot be used to assert causal relationships (Johnson, 2001; Russo, 2011; Taylor, 1990). I delimited this study to assess turnover intentions rather than actual turnover due to time limitations; thus, there are no assertions about whether high turnover intentions would translate into actual turnover among these respondents.

The use of the AHS may have limited my study's specificity regarding how hope operationalizes in crisis workers' leave/stay decisions. Using a well-established and verified global hope scale optimized the scale's likelihood of achieving construct validity. However, the measure did not assess whether respondents identified hopefulness within their jobs. Since the AHS items are phrased globally (e.g., "I can think of many ways to get out of a jam"), assessing whether respondents perceive the ability to act on their hope within their job roles and specifications was not possible. So, while the AHS meets construct validity guidelines, the scale may not have been specific enough to identify how respondents' scores reflected professional hopefulness.

My research questions and hypotheses did not specify professional hopefulness as the target, so the selection of the AHS scale was not misguided. Nonetheless, the abnormal distribution of the results, the lower alpha, and the overall weakness of the effect size could be symptoms of a scale that could not adequately discriminate how this tested variable operationally related to the other variables (da Motta et al., 2020). Further, since this study was not longitudinal, I cannot discern whether crisis workers' ratings of hope and turnover intentions have shifted since the beginning of the pandemic to assess whether changes in hope over time may account for variances in turnover intentions. The cross-sectional design thus also limits the generalizability of these research results to other periods with differing rates of turnover and job stress.

Recommendations

Future researchers may want to compare crisis workers to other HSPs or employees from many fields. I studied crisis workers to begin developing data on crisis as a niche field; future research is needed to contextualize crisis workers among the greater population to identify what differences might exist and to what degree. I also propose that future researchers utilize comparison of means analysis to examine whether factors other factors that have been linked to turnover intention risk factors might be replicated among crisis workers. These factors might include age (Christian-Brandt et al., 2020; Fukui et al., 2020; Mobley et al., 1978), gender (Chang et al., 2019; Fukui et al., 2020; Park & Ko, 2020), income (Agyapong et al., 2015; Bukach et al., 2017; Cosgrave et al., 2015; Lisinski, 2019), fear of or being exposed to aggression and violence (Agyapong et al., 2015; Christan-Brandt et al., 2020; McDermid et al., 2020), supervisory

status (Nagamine et al., 2018), team staffing stability (Lisinski, 2019; Woltmann & Whitley, 2007), secondary traumatic stress (Passmore et al., 2020), and burnout (Chen et al., 2019; Christian-Brandt et al., 2020; Passmore et al., 2020).

Researchers have examined factors contributing to meaning in work as both practical factors (Fouché et al., 2017; Lips-Wiersma & Wright, 2012; Rosso et al., 2010), like job crafting ability (Vermooten et al., 2019), and transcendent factors (Rosso et al., 2010; Steger et al., 2012), like a sense of calling (Fouché et al., 2017). Future researchers could examine whether hope's two factors, pathways and agency, since existing literature highlights other components of transcendence (Rosso et al., 2010; Schnell et al., 2013), some theorists propose hope as a transcendent factor (Eger, 2020; Havel, 2004), and meaning in work and hope were positively related in this study. Since this sample included only crisis-serving HSPs and the data was collected during the Great Resignation and pandemic, researchers might also explore whether the unanticipatedly positive relationship between meaning in work and turnover intentions would be replicated in crisis workers at other times (Frankfort-Nachmias & Leon-Guerrero, 2018). Future researchers might also assess hope's relationship with turnover intention and meaning in work using a state-specific scale to determine with a state- or domain-specific scale might produce different results (Juntunen et al., 2014).

Given the surprising result that meaning in work had a positive relationship with turnover intentions, I recommend repeating this assessment among crisis workers at other periods and tracking for changes. A longitudinal analysis can examine shifts over time to discern whether this unexpected result was more reflective of crisis workers' feelings

during the pandemic and the *Great Resignation* or whether this outcome was a stable representation of crisis workers' views on leaving their jobs. Future researchers should also explore whether previously identified risk factors might explain this unexpected relationship. Such research could examine whether respondents with higher meaning in work are more prone to feel traumatized by work events, experience burnout, or feel adverse effects of dueling job responsibilities.

Finally, further research is needed to explore turnover intention factors and actual turnover. Future researchers should examine the three subscales of Cohen's TIS (1999) to assess whether respondents vary in their thoughts about leaving their current job, organization, and occupation. Researchers have demonstrated that a toxic work environment was ten times more predictive of job departure than other factors (Sull et al., 2022). Thus, exploring whether crisis workers are more intent on leaving their jobs, employers, or occupations may provide better context for turnover intentions and offer more avenues to develop adequate retention strategies. Since the relationship between turnover intentions and actual turnover has not been stable throughout the literature (Crossley et al., 2007; Fukui et al., 2020; Mobley et al., 1978), examining pathways from consideration to departure and contributing factors could inform more effective retention strategies and contribute to the literature of diverging theoretical models of turnover.

Implications

I provided an initial evaluation of crisis workers' turnover intentions and how their meaning in work and hope affected their considerations to leave their jobs. During a period in which people have voluntarily left their jobs in unprecedented numbers to

pursue other opportunities (BLS, 2022b), I attempted to identify protective factors to crisis workers' resignation. Instead, participants with higher meaning in work and hope were more likely to consider leaving their jobs. Since employee meaning in work tends to be associated with clients feeling more cared for and having higher self-esteem (Lavy & Naama-Ghanayim, 2020), the strong positive relationship between meaning in work and turnover intentions among these crisis workers poses risks to client care.

A potential area for positive social change from my research study is quantifying meaning in work as a risk factor for crisis workers during this pandemic and the *Great Resignation* to job departure. Though the prognostication that meaning in work coincided with high turnover intentions is bleak, this outcome also reinforces the need for robust protective factors to turnover that attend to employees' needs in meaningful ways, guided by the theory of job embeddedness (Mitchell et al., 2001). Previous researchers have demonstrated that meaning in work can be a protective factor against employees wanting to leave their jobs (Akgunduz et al., 2020; Fouché et al., 2017; Heleno et al., 2018; Vermooten et al., 2019. That otherwise reliable outcome could mean that employers of crisis workers can use this data to develop touchpoints and preventive efforts to retain crisis workers. In this research study, I observed that high meaning in work is a current risk factor for crisis workers, providing data to companies that employ crisis workers that implore managers and administrators to act quickly to improve conditions and increase retention. Because the pandemic has had profound adverse effects on some crisis workers (Yeo et al., 2021), investigating and amplifying job supports and conditions might promote wellness to better protect from turnover intentions. Exposing this anomalous

result provides data that companies can use to improve crisis workers' work environment and prevent a further slide into the Great Resignation.

Conclusion

The purpose of this cross-sectional, quantitative research analysis was to assess whether meaning in work was related to turnover intentions, hope related to turnover intentions, and whether hope moderated the relationship between crisis workers' meaning in work and turnover intentions at statistically significant levels. I rejected the null hypothesis that meaning in work would not have a statistically significant relationship with turnover intentions. I failed to reject the null hypotheses that hope would account for a variance in turnover intentions at a statistically significant level, and that hope would moderate the relationship between meaning in work and turnover intentions among crisis workers at a statistically significant level. I observed a statistically significant, strong positive correlation between meaning in work and turnover intentions, which diverged from existing literature. Though hope was not related to turnover intentions at a statistically significant level when entered into Step 2 of multiple regression, it was significant when entered into Step 1. I proposed that the unanticipated positive correlation between meaning in work and turnover intentions could guide retention efforts that honor how crisis workers feel about their jobs. I also recommended that future research reassess crisis workers' meaning in work and turnover intentions to assess whether these results were more reflective of the Great Resignation, stressors associated with the pandemic, or associated with crisis workers at other periods. I conclude that the unexpected directionality of the relationship between meaning in work and turnover

intentions among crisis-serving HSPs, collected 18 months into a pandemic that has uniquely taxed crisis workers amid the Great Resignation, demonstrates the dynamic toll that these events have had on crisis workers.

References

Abid, G., & Butt, T. H. (2017). Expressed turnover intention: Alternate method for knowing turnover intention and eradicating common method bias. *International Letters of Social and Humanistic Sciences*, *78*, 18–26. https://doi.org/10.18052/www.scripress.com/ILSHS.78.18

Aguinis, H., Gottfredson, R. K., & Joo, H. (2013). Best-practice recommendations for defining, identifying, and handling outliers. *Organizational Research Methods*, *16*(2), 270–301. https://doi.org/10.1177/1094428112470848

Agyapong, V. I. O., Osei, A., Farren, C. K., & McAuliffe, E. (2015). Factors influencing the career choice and retention of community mental health workers in Ghana. *Human Resources for Health, 13*(1), 56–66. https://doi.org/10.1186/s12960-015-0050-2

Akgunduz, Y., Gok, O. A., Alkan, C. (2020). The effects of rewards and proactive personality on turnover intentions and meaning of work in hotel businesses. *Tourism and Hospitality Research*, *20*(2), 170–183. https://doi.org/10.1177/1467358419841097

Arnold, H. J., & Feldman, D. C. (1982). A multivariate analysis of the determinants of job turnover. *Journal of Applied Psychology, 67*(3), 350–360. https://doi.org/10.1037/0021-9010.67.3.350

Arnoux-Nicholas, C., Sovet, L., Lhotellier, L., Di Fabio, A., & Bernaud, J.-L. (2016). Perceived work conditions and turnover intentions: The mediating role of meaning of work. *Frontiers in Psychology, 7*.

https://doi.org/10.3389/fpsyg.2016.00704

Asikainen, J., Vehviläinen-Julkunen, K., Repo-Tiihonen, E., & Louheranta, O. (2020). Violence factors and debriefing in psychiatric inpatient care: A review. *Journal of Psychosocial Nursing & Mental Health Services, 58*(5), 39–49. http://doi.org/10.3928/02793695-20200306-01

Babbie, E. (2017). *The basics of social research* (7th ed.). Cengage Learning.

Bailes, L. P., & Nandakumar, R. (2020). Get the most from your survey: An application of Rasch analysis for education leaders. *International Journal of Education Policy and Leadership, 16*(2), 1–19. https://doi.org/10.22230/ijepl.2020v16n2a857

Bailey, T. C., Eng, W., Frisch, M. B., & Snyder, C. R. (2007). Hope and optimism as related to life satisfaction. *The Journal of Positive Psychology, 2*(3), 168–175. https://doi.org/10.1080/1743976070149546

Bangura, J. B. (2016). Hope in the midst of death: Charismatic spirituality, healing evangelists and the Ebola crisis in Sierra Leone. *Missionalia: Southern African Journal of Missiology, 44*(1), 2–18. https://doi.org/10.7832/44-1-113

Barley, J., & Sullivan, K. (2022, January 1). Will they stay or will they go now? It's all about EQ: How emotional intelligence can disrupt the "Great Resignation." *AALL Spectrum, 26*(3), 16–19.

Baron, R., & Kenny, D. (1986). Moderator-mediator variables distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Barrington, A. J., & Shakespeare-Finch, J. (2013). Working with refugee survivors of torture and trauma: An opportunity for vicarious post-traumatic growth. *Counselling Psychology Quarterly, 26*(1), 89–105. https://doi.org/10.1080/095157070.2012.727553

Barton, A. (1969). *Communities in disaster: A sociological analysis of collective stress situations.* Doubleday.

Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology, 42*(6), 861–865. https://doi.org/10.1037/h0037562

Becker, J.-M., Ringle, C., Sarstedt, M., & Volckner, F. (2015). How collinearity affects mixture regression results. *Marketing Letters, 26*(4), 643–659. https://doi.org/10.1007/s11002-014-9299-9

Bennett, C. L., Sullivan, A. F., Ginde, A. A., Rogers, J., Espinola, J. A., Clay, C. E., & Camargo, Jr., C. A. (2020). National study of emergency physician workforce, 2020. *Annals of Emergency Medicine, 76*(6), 695–708. https://doi.org/10.1016/j.annemergmed.2020.06.039

Bishop, E. C., & Willis, K. (2014). "Without hope everything would be doom and gloom": Young people talk about the importance of hope in their lives. *Journal of Youth Studies, 17*(6), 778–793. https://doi.org/10.1080/13676261.2013.878788

Bong, H. E. (2019). Understanding moral distress: How to decrease turnover rates of new graduate pediatric nurses. *Pediatric Nursing, 45*(3), 109–114.

Boris, E., & Kleinberg, S. J. (2003). Mothers and other workers. *Journal of Women's*

History, *15*(3), 90–117. https://doi.org/10.1353/jowh.2003.0061

Borjas, G. J., & Edo, A. (2021). *Gender, selection into employment, and the wage impact of immigration*. National Bureau of Economic Research. https://doi.org/10.3386/w28682

Bosk, E. A., Williams-Butler, A., Ruisard, D., & MacKenzie, M. J. (2020). Frontline staff characteristics and capacity for trauma-informed care: Implications for the child welfare workforce. *Child Abuse and Neglect.* https://doi.org/10.1016/j.chiabu.2020.104536

Bothma, C. F. C., & Roodt, G. (2013). The validation of the turnover intention scale. *SA Journal of Human Resource Management*, *11*(1), #507, 12 pages. https://doi.org/10.4102 /sajhrm.v11i1.507

Bowman, M. E. (2019). Attachment theory, supervision, and turnover in child welfare. *Child Welfare*, *97*(1), 1-19.

Brabson, L. A., Harris, J. L., Lindhiem, O., & Herschell, A. D. (2020). Workforce turnover in community behavioral health agencies in the USA: A systematic review with recommendations. *Clinical Child and Family Psychology Review*, *23*(3), 297—315. https://doi.org/10.1007/s10567-020-00313-5

Browning, B. R., McDermott, R. C., & Scaffa, M. E. (2019). Transcendent characteristics as predictors of counselor professional quality of life. *Journal of Mental Health Counseling*, *4*(1), 51—64. https://doi.org/10.1774/mehc.41.1.05

Brucker, K., Duggan, C., Niezer, J., Roseberry, K., Le-Niculescu, H., Niculescu, A. B., & Kline, J. A. (2018). Assessing risk of future suicidality in emergency department

patients. *Academic Emergency Medicine, 26*(4), 376—383. https://doi.org/10.1111/acem.13562

Bukach, A. M., Ejaz, F. K., Dawson, N., & Gitter, R. J. (2017). Turnover among community mental health workers in Ohio. *Administration and Policy in Mental Health and Mental Health Services Research, 44*(1), 115—122. https://doi.org/s10488-015-0706-1

Califf, C. B., & Brooks, S. (2020). An empirical study of techno-stressors, literacy facilitation, burnout, and turnover intention as experienced by K-12 teachers. *Computers and Education, 157*. https://doi.org/10.1016/j.compedu.2020.103971

Carter, E. W., & Lunsford, L. B. (2005). Meaningful work: Improving employment outcomes for transition-aged youth with emotional and behavioral disorders. *Preventing School Failure, 49*(2), 63—69. https://doi.org/10.3200/PSFL.49.2.63-69

Chang, H., Chu, T., Liao, Y., Chang, Y., & Teng, C. (2019). How do career barriers and supports impact nurse professional commitment and professional turnover intention? *Journal of Nursing Management, 27*(2), 347—356. https://doi.org/10.1111/jonm.12674

Chen, X., Ran, L., Zhang, Y., Yang, J., Yao, H., Zhu, S., & Tan, X. (2019). Moderating role of job satisfaction on turnover intention and burnout among workers in primary care institutions: A cross-sectional study. *BMC Public Health, 19*(1), 1526—1535. https://doi.org/10.1186/s12889-019-7894-7

Cheung, K. L., ten Klooster, P. M., Smit, C., de Vries, H., & Pieterse, M. E. (2017). The

impact of non-response bias due to sampling in public health studies: A comparison of voluntary versus mandatory recruitment in a Dutch national survey on adolescent health. *BMC Public Health, 17*, 276—285. https://doi.org/10.1186/s12889-017-4189-8

Cheval, B., Cullati, S., Mongin, D., Schmidt, R. E., Lauper, K., Pihl-Thingvad, J., Chopard, P., & Courvoisier, D. S. (2019). Associations of regrets and coping strategies with job satisfaction and turnover intention: International prospective cohort study of novice healthcare professionals. *Swiss Medical Weekly, 149*, w20074. https://doi.org/10.4414/smw.2019.20074

Chisholm, R. F., Kasl, S. V., & Eskenazi, B. (1983). The nature and predictors of job related tension in a crisis situation: Reactions of nuclear workers to the Three Mile Island Accident. *Academy of Management Journal*, *26*(3), 385—405. https://doi.org/10.2307/256252

Christian-Brandt, A. S., Santacrose, D. E., & Barnett, M. L. (2020). In the trauma-informed care trenches: Teacher compassion satisfaction, secondary traumatic stress, burnout, and intent to leave education within underserved elementary schools. *Child Abuse and Neglect, 110*(2020), #104437. https://doi.org/10.1016/j.chiabu.2020.104437

Chung, Y., & Choo, H. (2019). A structural path to job satisfaction, burnout, and intent to leave among child protection workers: A South Korean study. *Children and Youth Services Review, 100*, 304—312. https://doi.org/10.1016/j.childyouth.2019.03.18

Citino, C., Santaniello, S., Goodman, M., Weekes, M., & Yelenak, B. (2017). *Who will*

care?: The workforce crisis in human services. Massachusetts Council of Human Service Providers, Inc. http://providers.org/assets/2018/07/WhoWillCareReport.final_.pdf

Cohen, A. (1999). The relation between commitment forms and work outcomes in Jewish and Arab culture. *Journal of Vocational Behavior, 54*(3), 371—391. https://doi.org/10.1006/jvbe.1998.1669

Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science, 1*(3), 98—101. https://doi.org/10.1111/1467-8721.ep10768783

Cohen, K., & Collens, P. (2013). The impact of trauma work on trauma workers: A metasynthesis on vicarious trauma and vicarious posttraumatic growth. *Psychological Trauma: Theory, Research, Practice, and Policy, 5*(6), 570---580. https://doi.org/10.137/a0030388

Cole-King, A., & Platt, S. (2017). Suicide prevention for physicians: Identification, intervention, and mitigation of risk. *Medicine, 45*(3), 131—134. https://doi.org/10.1016/j.mpmed.2016.12.012

Converso, D., Viotti, S., Sottimano, I., Cascio, V., & Guidetti, G. (2018). Musculoskeletal disorders among preschool teachers: Analyzing relationships among relational demands, work meaning, and intention to leave the job. *BMC Musculoskeletal Disorders, 19*(156). https://doi.org/10.1186/s12891-018-2081-z

Cosgrave, C., Hussain, R., & Maple, M. (2015). Retention challenge facing Australia's rural community mental health services: Service managers' perspectives. *Australian Journal of Rural Health, 23*(5), 272—276.

https://doi.org/10.1111/ajr.12205

Costanza, D. P., Blacksmith, N., & Coats, M. (2015). Convenience samples and teaching organizational research methods. *TIP: The Industrial-Organizational Psychologist, 53*(1)1, 137—140.

da Motta, C., Castilho, P., Pato, M. T., & Barreto Carhalho, C. (2020). Construct validity, sensitivity and specificity of the USCD Performance-based Skill Assessment 2 in a mixed Portuguese sample. *Human Psychopharmacology, 35*(4), e2735. https://doi.org/10.1002/hup. 2735

Dahling, J. J., & Librizzi, U. A. (2015). Integrating the theory of work adjustment and attachment theory to predict job turnover intentions. *Journal of Career Development, 42*(3), 215—228. https://doi.org/10.1177/0894845314545169

Daoud, J. I. (2017). Multicollinearity and regression analysis. *Journal of Physics: Conference Series, 949*(2017). https://doi.org/10/1088/172-6596/949/1/012009

de Haan, E., Verhoef, P. C., & Wiesel, T. (2015). The predictive ability of different customer feedback metrics for retention. *International Journal of Research in Marketing, 32*(2), 195—206. https://doi.org/10.1016/j.ijresmar.2015.02.004

Desboulets, L. D. D. (2018). A review on variable selection in regression analysis. *Econometrics, 6*(4), 45. https://doi.org/10.3390/econometrics6040045

DeVellis, R. F. (2003). *Scale development: Theory and applications* (2nd ed.). SAGE Publications.

Duffield, C. M., Roche, M. A., Homer, C., Buchan, J., & Dimitrelis, S. (2014). A comparative review of nurse turnover rates and costs across countries. *Journal of*

Advanced Nursing, 70(12), 2703—2712. https://doi.org/10.1111/jan.12483

Eger, E. (2020). *The Gift.* Scribner.

Fasbender, U., Van der Heijden, B. I. J. M., & Grimshaw, S. (2019). Job satisfaction, job stress and nurses' turnover intentions: The moderating roles of on-the-job and off-the-job embeddedness. *Journal of Advanced Nursing, 75*(2), 327—337. https://doi.org/10.1111/jan.13842

Flesaker, K., & Larsen, D. (2010). To offer hope you must have hope: Accounts of hope for reintegration counselors working with women on parole and probation. *Qualitative Social Work, 11*(1), 61—79. https://doi.org/10.1177/1473325010382325

Fouché, E., Rothmann, S., Sr., & van der Vyver, C. (2017). Antecedents and outcomes of meaningful work among school teachers. *SA Journal of Industrial Psychology, 43*(0), a1398. https://doi.org/10.4102/sajip.v43i0.1398

Frankfort-Nachmias, L., & Leon-Guerrero, A. (2018). *Social statistics for a diverse society: 8th ed.* Sage Publications.

Friedmann, E. A., & Havighurst, R. J. (1954). *The meaning of work and retirement.* The University of Chicago Press.

Fukui, S., Rollins, A. L., & Salyers, M. P. (2020). Characteristics and job stressors associated with turnover and turnover intention among community mental health providers. *Psychiatric Services, 71*(3), 289—292. https://doi.org/10.1176/appi.ps.201900246

Fukui, S., Wu, W., & Salyers, M. P. (2019). Mediational paths from supervisor support to

turnover intention and actual turnover among community mental health providers. *Psychiatric Rehabilitation Journal, 42*(4), 350—357. https://doi.org/10.1037/prj0000362

Furness, S., Hanson, L., & Spier, J. (2020). Archetypal meanings of being a paramedic: A hermeneutic review. *Australasian Emergency Care*, 1—6. https://doi.org/10.106/j.auec.2020.08.002

Gao, S., Mokhtarian, P. L., & Johnston, R. A. (2008). Nonnormality of data in structural equation models. *Journal of the Transportation Research Board, 2082*(14), 116—124. https://doi.org/10.1341/2082-14

Gilliatt, A., Powell, K., & Pizzuti, A. (2018). Social workers and mobile child crisis screening. *Health and Social Work, 43*(1), 59—62. https://doi.org/10.1093.hsw/hlx042

Gini, A. R., & Sullivan, T. (1988). Woman's work: Seeking identity through occupations. *Employee Responsibilities and Rights Journal, 1*(1), 39—45.

González-Gil, M. T., González-Blázquez, C., Parro-Moreno, A. I., Pedraz-Marcos, A., Palmar-Santos, A., Otero-García, L., Navarta-Sánchez, M. V., Alcolea-Cosín, M. T., Argüello-López, M. T., Canalejas-Pérez, C., Carrillo-Camacho, M. E., Casillas-Santana, M. L., Díaz-Martínez, M. L., García-González, A., García-Perea, E., Martínez-Marcos, M., Martínez-Martín, M. L., Palazuelos-Puerta, M. d. P., Sellán-Soto, C., Oter-Quintana, C. (2021). Nurses' perceptions and demands regarding COVID-19 care delivery in critical care units and hospital emergency setting. *Intensive and Critical Care Nursing, 62*, 102966.

https://doi.org/10.1016/j.iccn.2020.102966

Greenberg, M. (2022). The culture of medicine and physician suicide. *Annals of Emergency Medicine, 79*(2), 214—215. https://doi.org/10.1016/j.annemergmed.2021.08.005

Grewal, P. K., & Porter, J. E. (2007). Hope theory: A framework for understanding suicidal action. *Death Studies, 31*(2), 131—154. https://doi.org.10.1080/07481180601100491

Griffeth, R. W., & Hom, P. W. (1988). A comparison of different conceptualizations of perceived alternatives in turnover research. *Journal of Organizational Behavior, 9*(2), 103—111. https://doi.org/10.1002/job.4030090202

Griffiths, A., Murphy, A., Desrosiers, P., Harper, W., & Royse, D. (2020a). Factors influencing the turnover of frontline public child welfare supervisors. *Journal of Public Child Welfare, 14*(5), 553—569. https://doi.org/10.1080/15548732.2019.1652719

Griffiths, A., Royse, D., Flaherty, C., & Collins-Camargo, C. (2020b). Perceptions of workload and job impact as predictors of child welfare worker health status. *Child Welfare, 98*(3), 97—120.

Guilaran, J., de Terte, I., Kaniasty, K., & Stephens, C. (2018). Psychological outcomes in disaster responders: A systematic review and meta-analysis on the effects of social support. *International Journal of Disaster Risk Science, 93*(3), 344—358. https://doi.org/10.1007/s13753-018-0184-7

Hackman, J. R., & Oldham, G. R. (1975). Development of the Job Diagnostic Survey.

Journal of Applied Psychology, *60*, 159—170.

Hackman, J. R., & Oldham, G. R. (1980). *Work redesign.* Addison-Wesley.

Hannagan, R. J. (2017). "I believe we are the fewer, the prouder": Women's agency in meaning-making after military sexual assault. *Journal of Contemporary Ethnography, 46*(5), 624—644. https://doi.org/10.1177/0891241616636664

Harris, S. G., Hirschfeld, R. R., Field, H. S., & Mossholder, K. W. (1993). Psychological attachment: Relationships with job characteristics, attitudes, and preferences for newcomer development. *Group and Organizational Management, 18*(4), 459—481.

Havel, V. (2004). An orientation of the heart. In Loeb, P. R. (ed.), *The impossible will take a little while: A citizen's guide to hope in a time of fear.* Basic Books.

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach, 2nd ed.* Guilford Press.

Hayes, A. F. (2021). The PROCESS macro for SPSS, SAS, and R. https://www.processmacro.org/download.html

Hayes, A. F., & Rockwood, N. J. (2017). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations, and implementation. *Behaviour Research and Therapy, 98*, 39—57. https://doi.org/10.1016/j.brat.2016.11.001

He, R., Liu, J., Zhang, W.-H., Zhu, B., Zhang, N., & Mao, Y. (2020). Turnover intention among primary health workers in China: A systematic review and meta-analysis. *BMJ Open, 10*(10). https://doi.org/10.1136/bmjopen-2020-037117

Heidari, M., Borujeni, M. G., & Rafiei, H. (2019). The assessment effect of spiritual care on hopelessness and depression in suicide attempts. *Journal of Religion and Health, 58*, 1453—1461. https://doi.org/10.1007/s10943-017-0473-2

Heleno, C. T., Borges, L. O., & Agullo-Tomas, E. (2018). The meaning of work as a predictor of the intention to remain/leave among teachers. *Revista de Administrado Mackenzie, 19*(spe). https://doi.org/10.1590/1678-6971/eRAMD180017

Hu, H., Wang, C., Lan, Y., & Wu, X. (2022). Nurses' turnover intention, hope and career identity: The mediating role of job satisfaction. *BMC Nursing, 21*, 43. https://doi.org/10.1186/12912-022-00821-5

Hu, J., & Hirsh, J. B. (2017). Accepting lower salaries for meaningful work. *Frontiers in Psychology, 8*(1649). https://doi.org/10.3389.fpsyg.2017.01649

Husain, W., Gulzar, A., Aqeel, M., Rana, A.-R. (2016). The mediating role of depression, anxiety, and stress between job strain and turnover intentions among male and female teachers. *FWU Journal of Social Sciences, 10*(1), 48—57.

James, R. K., & Gilliland, B. E. (2017). *Crisis intervention strategies* (8th ed.). Cengage Learning.

Janik, M., & Rothmann, S. (2015). Meaningful work and secondary school teachers' intention to leave. *South African Journal of Education, 35*(2), 1—13. https://doi.org/10.15700/saje.v35n2a1008

Johnson, K. F., & Brookover, D. L. (2021). Leveraging technology to reduce literacy

barriers on social health screening tools: Implications for human service professionals and administrators. *Journal of Technology in Human Services, 39*(1), 43—67. https://doi.org/10.1080/15228835.2020.1837052

Juntunen, C. L., Wettersten, K. B., Hong, P. Y. P., Choi, S., & Polanin, J. R. (2014). Work Hope Scale. *Journal of Social Service Research, 40,* 339—352. https://doi.org/10.1037/t00554-000

Kaiser, M. M. (1981). The meaning of work in literature popular with sixteen- and seventeen-year-olds. *Journal of Career Education, 7*(3), 220—231. https://doi.org/10.1177/089484538100700304

Kelley-Quon, L. I. (2018). Surveys: Merging qualitative and quantitative research methods. *Seminars in Pediatric Surgery, 27*(6), 361—366. https://doi.org/10.1053/j.sempedsurg.2018.10.007

Kim, H., & Kao, D. (2014). A meta-analysis of turnover intention predictors among U.S. child welfare workers. *Children and Youth Services Review, 47,* 214—223. https://doi.org/10.1016/j.childyouth.2014.09.015

Kim, J. (2019a). How principal leadership seems to affect early career teacher turnover. *American Journal of Education, 126*(1), 101—137. https://doi.org/10.1086/705533

Kim, J. H. (2019b). Multicollinearity and misleading statistical results. *Korean Journal of Anesthesiology, 72*(6), 558—569. https://doi.org/10.4097/kja.19087

Kitchingman, T. A., Caputi, P., Woodward, A., Wilson, C. J., & Wilson, I. (2018a). The impact of their role on telephone crisis support workers' psychological wellbeing

and functioning: Quantitative findings from a mixed methods investigation. *PLoS ONE, 13*(12), 1—13. https://doi.org/10.1371/journal.pone.0207645

Kitchingman, T. A., Wilson, C. J., Caputi, P., Wilson, I., & Woodward, A. (2018b). Telephone crisis support workers' psychological distress and impairment: A systematic review. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 39*(1), 13—26. https://doi.org/10.1027/0227-5910-a000454

Klonsky, E. D., Kotov, R., Bakst, S., Rabinowitz, J., & Bromet, E. J. (2012). Hopelessness as a predictor of attempted suicide among first admission patients with psychosis: A 10-year cohort study. *Suicide and Life-Threatening Behavior, 42*(1), 1—10. https://doi.org/10.111/j.1943-278X.2011.00066.x

Ko, K. J., & Lee, S.-K. (2019). Influence of resilience and job embeddedness on turnover intention in general hospital nurses. *Journal of Korean Academy of Nursing Administration, 25*(4), 362—372. https://doi.org/10.1111/jkana.2019.25.4.362

Kosfeld, M., Neckermann, S., & Yang, X. (2017). The effects of financial and recognition incentives across work contexts: The role of meaning. *Economic Injury, 55*(1), 237—247. https://doi.org/10.1111.ecin.12350

Kriska, D., Sass, M. M., & Fulcomer, M. C. (2013). *Assessing limitations and uses of convenience samples: A guide for graduate students.* ScholarWorks.

Laboe, C. W., Jain, A., Bodicheria, K. P., & Pathak, M. (2021). Physician suicide in the era of the COVID-19 pandemic. *Cureus, 13*(11), e19313. https://doi.org/10.7759/cureus.19313

Lamothe, J., & Guay, S. (2017). Workplace violence and the meaning of work in

healthcare workers: A phenomenological study. *Work, 56*(2), 185—197. https://doi.org/10.3233/WOR-172486

Laube-Morgan, J. (1992). The professionals' psychological response in disaster: Implications for practice. *Journal of Psychosocial Nursing and Mental Health Services, 30*(2), 17—22. https://doi.org/10.3928/0279-3695-19920201-06

Lavy, S., & Naama-Ghanayim, E. (2020). Why care about caring? Linking teachers' caring and sense of meaning at work with students' self-esteem, well-being, and school engagement. *Teaching and Teacher Education, 91*. https://doi.org/10.1016/j.tate.2020.103046

Lee, T. W. (1988). How job dissatisfaction leads to employee turnover. *Journal of Business and Psychology, 2*(3), 263—271. https://doi.org/10.1007/BF01014043

Lee, K., Pang, Y. C., Lee, J. A. L., & J. N. (2017). A study of adverse childhood experiences, coping strategies, work stress, and self-care in the child welfare profession. *Human Service Organization: Management, Leadership, & Governance, 41*(4), 389—402. https://doi.org/10.1080.23303131.2017.1302898

Leighton, K., Kardong-Edgren, S., Scheidereith, T., & Foisy-Doll, C. (2021). Using social media and snowball sampling as an alternative recruitment strategy for research. *Clinical Simulation in Nursing, 55*, 37—42. https://doi.org/10.1016/j.ecns.2021.03.006

Lerner, M. (1997). Preventing the societal crises of failed expectations and threatened self-esteem in the new economies: A proposal for helping the "generation at risk." *Social Justice Research, 10*(2), 241—252. https://doi.org/10.1007/BF026833315

Leunissen, J. M., Sedikides, C., Wildschut, T., & Cohen, T. R. (2018). Organizational nostalgia lowers turnover intentions by increasing work meaning: The moderating role of burnout. *Journal of Occupational Health Psychology, 23*(1), 44—57. https://doi.org/10.1037/ocp0000059

Lips-Wiersma, M., & Wright, S. (2012). Measuring the meaningful work: Development and validation of the Comprehensive Meaningful Work Scale (CMWS). *Group Organization and Management, 37*(5), 655—685. https://doi.org/10.1177/1059601112461578

Lisinski, C. (2019, May 29). Workforce woes creating crisis in state's human services, advocates tell legislators. *State House News Service.* https://www.wbur.org/commonhealth/2019/05/29/human-services-crisis-workforce-bills

MacKinnon, D. P. (2011). Integrating mediators and moderators in research design. *Research in Social Work Practice, 21*(6), 675—681. https://doi.org/10.1177/1049731511414148

Mahmud, S., Talukder, M. U., & Rahmann, S. M. (2020). Does "Fear of COVID-19" trigger future career anxiety? An empirical investigation considering depression from COVID-19 as mediation. *International Journal of Social Psychiatry, 67*(1). https://doi.org/10.1177/0020764020935488

Matulessy, A., Rakhim, A. F., & Pascarini, A. (2021). Understanding social support and work meaning to reduce work stress for police officers during the COVID-19 pandemic. *Review of International Geographical Education, 11*(3), 1206—1215.

https://doi.org/10.48047/rigeo.11.3.111

McDermid, F., Mannix, J., & Peters, P. (2020). Factors contributing t high turnover rates of emergency nurses: A review of the literature. *Australian Critical Care, 33,* 390—396. https://doi.org/10.1016/j.aucc.2019.09.002

Merchant, L. V., & Whiting, J. B. (2015). Challenges and retention of domestic violence shelter advocates: A grounded theory. *Journal of Family Violence, 30*(4), 467—478. https://doi.org/10.1007/s10896-015-9685-y

Meyer, J. P., Morin, A. J. S., Stanley, L. J., & Maltin, E. R. (2019). Teachers' dual commitment to the organization and occupation: A person-centered investigation. *Teaching and Teacher Education, 77,* 100—111. https://doi.org/10.1016/j.tate.2018.09.009

Miller, H. E., Katerberg, R., & Hulin, C. L. (1979). Evaluation of the Mobley, Horner, and Hollingsworth model of employee turnover. *Journal of Applied Psychology, 64*(5), 509—517. https://doi.org/10.1037/0021-9010.64.5.509

Milliman, J., Gatling, A., & Bradley-Geist, J. C. (2017). The implications of workplace spirituality for person-environment fit theory. *Psychology of Religion and Spirituality, 9*(1), 1—12. https://doi.org/10.1037/rel0000068

Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal, 44*(6), 1102—1121. https://doi.org/10.5465/3069391

Mitchell, T. R., & Lee, T. W. (2001). The unfolding model of voluntary turnover and job embeddedness: Foundations for a comprehensive theory of attachment. *Research*

in Organizational Behavior, *23*, 189-246. https://doi.org/10.1016/S0191-3085(01)23006-8

Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology*, *62*(2), 237—240. https://doi.org/10.1037/0021-9010.62.2.237

Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin, 86*(3), 493—422. https://doi.org/10.1037/0033-2909.86.3.493

Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology, 63*(4), 408—414. https://doi.org/10.1037/0021-9010.63.4.408

Morse, N. C., & Weiss, R. S. (1955). The function and meaning of work and the job. *American Sociological Review, 20*, 191—198. https://doi.org/10.2307/2088325

Mowday, R. T., Koberg, C. S., & McArthur, A. W. (1984). The psychology of the withdrawal process: A cross-validation test of Mobley's intermediate linkages model of turnover in two samples. *Academy of Management Journal, 27*(1), 79—94. https://doi.org/10.5465/255958

Nagamine, M., Shigemura, J., Fujiwara, T., Waki, F., Tanichi, M., Saito, T., Toda, H., Yoshino, A., & Shimizu, K. (2018). The relationship between dispositional empathy, psychological distress, and posttraumatic stress responses among Japanese uniformed disaster workers: A cross-sectional study. *BMC Psychiatry, 18*(1), 328—335. https://doi.org/10.1186/s12888-018-1915-4

Nelson, D., Price, E., & Zubrzycki, J. (2017). Critical social work with unaccompanied asylum-seeking young people: Restoring hope, agency and meaning for the client and worker. *International Social Work, 60*(3), 601—613. https://doi.org/10.1177/0020872816637663

Nield, K., & Nordstrom, A. T. (2016). *Response bias in voluntary surveys: An empirical analysis of the Canadian Census* (No. CEP 16-10). *Carlton Economics Working Papers (CEWP)*. Department of Economics. https://ir.library.carleton.ca/pub/15009

Park, B., & Ko, Y. (2020). Turnover rates and factors influencing turnover of Korean acute care hospital nurses: A retrospective study based on survival analysis. *Asian Nursing Research, 14*(5), 293—299. https://doi.org/10.1016/j.anr.2020.09.001

Park, K. A., & Johnson, K. R. (2019). Job satisfaction, work engagement, and turnover intention of CTE health science teachers. *International Journal for Research in Vocational Education and Training, 6*(3), 224—242. https://doi.org/10.13152/IJRVET.6.3.2

Park, T., & Pierce, B. (2020). Transformational leadership and turnover intention in child welfare: A serial mediation model. *Journal of Evidence-Based Social Work, 17*(5), 576—592. https://doi.org/10.1080/26408066.2020.1781729

Passmore, S., Hemming, E., Chancellor McIntosh, H., & Hellman, C. M. (2020). The relationship between hope, meaning in work, secondary traumatic stress, and burnout among child abuse pediatric clinicians. *The Permanente Journal, 24*(19), 29—34. https://doi.org/10.7812/TPP/19.087

Paterson, H., Reniers, R., & Vollm, B. (2009). Personality types and mental health experiences of those who volunteer for helplines. *British Journal of Guidance and Counseling*, *37*(4), 459—471. https://doi.org/10.1080/03069880903161419

Prado, P. H., Korelo, J. C., & Mantovani, D. (2014). Mediation, moderation and conditional process analysis. *Revista Brasileira de Marketing*, *13*(04), 4—24. https://doi.org/10.5585/remark.v13i4.2739

Ragin, C. C. (2014). *The comparative method: Moving beyond qualitative and quantitative strategies.* University of California Press.

Roche, M. A., Duffield, C. M., Homer, C., Buchan, J., & Dimitrelis, S. (2015). The rate and cost of nurse turnover in Australia. *Collegian*, *22*(4), 353—358. https://doi.org/10.1016/j.colegn.2014.05.002

Rose, M., Barber, E., Newland, C., & Young, A. (2015). Critical stress: Survey reveals alarming rates of EMS provider stress and thoughts of suicide. *Journal of Emergency Medical Services*, *40*(10), 30—34.

Rosso, B. D., Dekas, K. H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, *30*, 91—127. https://doi.org/10.1016/j.riob.2010.09.001

Russo, F. (2011). Correlational data, causal hypotheses, and validity. *Journal for General Philosophy of Science*, *42*(1), 85—107. https://doi.org/10.1007/s10838-011-9157-x

Ryan, S. V., von der Embse, N. P., Pendergast, L. L., Saeki, E., Segool, N., & Schwing, S. (2017). Leaving the teaching profession: The role of teacher stress and

educational accountability policies on turnover intent. *Teaching and Teacher Education, 66,* 1—11. https://doi.org/10.1016/j.tate.2017.03.016

Schaack, D. D., Le, V.-N., & Stedron, J. (2020). When fulfillment is not enough: Early childhood teacher occupational burnout and turnover intentions from a job demands and resources perspective. *Early Education and Development, 31*(7), 1011—1030. https://doi.org/10.1080/10409289.2020.1791648

Schnell, T., Hoge, T., & Pollet, E. (2013). Predicting meaning in work: Theory, data, implications. *The Journal of Positive Psychology, 8*(6), 543—554. https://doi.org/10.1080/17439760.2013.830763

Scouten, W. T., Mehalick, M. L., Yoder, E., McCoy, A., Brannock, T., & Riddle, M. S. (2017). The epidemiology of operation stress during Continuing Promise 2011: A humanitarian response and disaster relief mission aboard a US Navy hospital ship. *Prehospital and Disaster Medicine, 32*(4), 393—402. https://doi.org/10.1017/S1049023X17000218

Sheather, J., & Slattery, D. (2021). The great resignation: How do we support and retain staff already stretched to their limit? *BMJ (Clinical Research Ed.), 375*, n2533. https://doi.org/10.1136/bmj.n2533

Shiri, S., Wexler, I., Marmor, A., Meiner, Z., Schwartz, I., Levzion Korach, O., & Azoulay, D. (2020). Hospice care: Hope and meaning in life mediate subjective well-being of staff. *American Journal of Hospice and Palliative Medicine, 379*(10), 785—790. https://doi.org/10.1177/1049909120905261

Sims, R. L., & Kroeck, K. G. (1994). The influence of ethical fit on employee

satisfaction, commitment and turnover. *Journal of Business Ethics, 13*(12), 939—947. https://doi.org/10.1007/BF00881663

Smoyak, S. A. (2005). Disaster response for mental health professionals. *Journal of Psychosocial Nursing, 43*(11), 18—21. https://doi.org/10.3928/02793695-20051101-03

Snyder, C. R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling and Development, 73*, 355—360. https://doi.org/10.1002/j.1556-6676.1995.tb01764.x

Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry, 13,* 249—275. https://doi.org/10/1207/S15327965PLI1304_01

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yosinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology, 60*(4), 570—585. https://doi.org/10.1037/0022-3514.60.4.570

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., Harney, P., Anestis, M. D., Moberg, F. B., & Arnau, R. C. (2014) Hope and the interpersonal-psychological theory of suicidal behavior: Replication and extension of prior findings. *Suicide and Life-Threatening Behavior, 44*(2), 175—187. https://doi.org/10.1111/sltb.12060

Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology, 34*(2), 125—137.

https://doi.org/10.1007/s10869-018-09613-8

Spencer, D. G., Spencer, D. C., & Steers, R. M. (1981). Performance as a moderator of the job satisfaction-turnover relationship. *Journal of Applied Psychology, 66*, 511—514. https://doi.org/10.1037/0021-9010.66.4.511

Stanley, I. H., Simpson, S., Wortzel, H. S., & Joiner, T. E. (2019). Documenting suicide risk assessments and proportionate clinical actions to improve patient safety and mitigate legal risk. *Behavioral Sciences and the Law, 37*(3), 304—312. https://doi.org/10.1002/bsl.2409

Steele, H. (2020). Covid-19, fear, and the future: An attachment perspective. *Clinical Neuropsychiatry, 17*(2), 97—99. https://doi.org/10.36131/CN20200213

Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The work and meaning inventory. *Journal of Career Assessment, 20*(3), 322—337. https://doi.org/10.1177/10690727114366160

Steinheider, B., Hoffmeister, V., Brunk, K., Garrett, T., & Munoz, R. (2020). Dare to care: Exploring the relationships between socio-moral climate, perceived stress, and work engagement in a social service agency. *Journal of Social Service Research, 46*(3), 394—405. https://doi.org/10.1080/01488376.2019.1575324

Stevens, J. P. (2009). Applied multivariate statistics for the social sciences (5th ed.). Routledge Academic.

Stieglitz, E. J. (1954). The meaning of work and retirement. *Geriatric, 9*(11), 546.

Strong, S. (1998). Meaningful work in supportive environments: Experiences with the recovery process. *American Journal of Occupational Therapy, 52*(1), 31—38.

https://doi.org/10.5014/ajot.52.1.31

Stuart, B., Danaher, T., Awdish, R., & Berry, L. (2019). Finding hope and healing when cure is not possible. *Mayo Clinic Proceedings, 94*(4), 677—685. https://doi.org/10.1016/j.mayocp.2019.01.006

Sull, D., Sull, C., & Zweig, B. (2022, Jan. 11). Toxic culture is driving the Great Resignation: Research using employee data reveals the top five predictors of attrition and actions managers can take in the short term to reduce attrition. *MIT Sloan Management Review.* https://sloanreview.mit.edu/article/toxic-culture-is-driving-the-great-resignation/

Sun, J., Lee, J. W., & Sohn, Y. W. (2019). Work context and turnover intention in social enterprises: The mediating role of meaning in work. *Journal of Managerial Psychology*, *34*(1), 46—60. https://doi.org/10.1108/JMP-11-2017-0412

Sundram, F., Courattur, T., Dong, C., & Zhong, K. (2018). Motivations, expectations, and experiences in being a mental health helplines volunteer. *International Journal of Environmental Research and Public Health, 15*(10). https://doi.org/10.3390/ijerph15102123

Taris, T. W., Kessler, S. R., & Kelloway, E. K. (2021). Strategies addressing the limitations of cross-sectional designs in occupational health psychology: What they are good for (and what not). *Work and Stress, 35*(1), 1—5. https://doi.org/10.1080/026787373.2021.1888561

Tarvydas, V. M., Levers, L. L., Teahen, P. R. (2017). Ethical guidelines for mass trauma and complex humanitarian emergencies. *Journal of Counseling and Development,*

95(3), 260—268. https://doi.org/10.1002/jcad.12140

Tavormina, M., & Clossey, L. (2017). Exploring crisis and its effects on workers in child protective services work. *Child and Family Social Work*, *22*(1), 126—136. https://doi.org/10.1111/cfs.12209

Taylor, R. (1990). Interpretation of the correlation coefficient: A basic review. *Journal of Diagnostic Medical Sonography*, *1*, 35—39. https://doi.org/10.1177/875647939000600106

Teixeira Moffat, C. (2011). Helping those in need: Human service workers. U.S. Bureau of Labor Statistics. *Occupational Outlook Quarterly, Fall 2011*, 23—32. www.bls.gov/careeroutlook/2011/fall/art03.pdf

Treadgold, R. (1999). Transcendent vocations: Their relationship to stress, depression, and clarity of self-concept. *Journal of Humanistic Psychology*, *39*(1), 81—105. https://doi.org/10.1177/0022167899391010

Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In Lawler, E. J. (ed.), *Advances in Group Processes*, 17—122. J Al Press.

Turner, J. C. (1987). Introducing the problem: Individual and group. *Rediscovering the social group: A self-categorization theory.* Basil Blackwell.

Ungvarsky, J. (2020). Snowball sampling. *Salem Press Encyclopedia.*

U.S. Bureau of Labor and Statistics. (2018, July). Careers in disaster relief. www.bls.gov/careeroutlook/2018/article/disaster-relief-careers.htm

U.S. Bureau of Labor and Statistics. (2020, March 17). Annual total separations rates by

industry and region, not seasonally adjusted. https://www.bls.gov/news.release/jolts.t16.htm

U.S. Bureau of Labor and Statistics. (2021, April 9a). EMTs and paramedics. www.bls.gov/ooh/healthcare/emts-and-paramedics.htm

U.S. Bureau of Labor and Statistics. (2021, April 9b). Substance abuse, behavioral disorder, and mental health counselors. www.bls.gov/ooh/community-and-social-services/substance-abuse-behavioral-disorder-and-mental-health-counselors.htm

U.S. Bureau of Labor and Statistics. (2021, June 2c). Physicians and surgeons. www.bls.org/ooh/healthcare/physicians-and-surgeons.htm

U.S. Bureau of Labor and Statistics. (2022a, Jan. 20). Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity. https://www.bls.gov/cps/cpsaat11.htm

U.S. Bureau of Labor and Statistics (2022b, March 10). Table 4. Quits levels and rate by industry and region, seasonally adjusted. https://www.bls.gov/new.release/jolts.t04.htm

van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma.* Viking.

Vermooten, N., Boonzaier, B., & Kidd, M. (2019). Job rafting, proactive personality and meaningful work: Implications for employee engagement and turnover intention. *SA Journal of Industrial Psychology*, *45*, a1567. https://doi.org/10.4102/sajip.v45i0.1567

Wall Emerson, R. (2021). Convenience sampling revisited: Embracing its limitations

through thoughtful study design. *Journal of Visual Impairment and Blindness, 115*(1), 76—77. https://doi.org/10.1177/014582X20987707

Wang, H., & Hall, N. C. (2019). When "I care" is not enough: An interactional analysis of teacher values, value congruence, and well-being. *Teaching and Teacher Education, 86*. https://doi.org/10.1016/j.tate.2019.102906

Weishaar, M. E., & Beck, A. T. (1992). Hopelessness and suicide. *Internal Review of Psychiatry, 4*(2). 177—184. https://doi.org/10.3109/09540269209066315

Whiting, N. (1998). Should volunteers drink deep? *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 19*(3), 138-139. https://doi.org/10.1027/0227-5910.19.3.138

Wienclaw, R. A. (2019). Sampling. *Salem Press Encyclopedia.*

Williams, G. (1955). The meaning of work and retirement/ One man's vision (Book). *Sociological Review, 3*(1), 145—147. https://doi.org/10.1111/j.1467-954X.1955.tb01049.x

Wilson, C., Rouse, L., Rae, S., & Kar Ray, M. (2018). Mental health inpatients' and staff members' suggestions for reducing physical restraint: A qualitative study. *Journal of Psychiatric and Mental Health Nursing, 25*(3), 188—200. https://doi.org/10.1111/jpm.12453

Wines, M., Hyatt-Burkhart, D., & Coppock, C. (2019). Multifaceted traumatic exposure: Simultaneous direct and vicarious trauma among EMS personnel. *Journal of Counselor Practice, 10*(2), 90—111. https://doi.org/10.22229/mte1022019

Woltmann, E. M., & Whitley, R. (2007). The role of staffing stability in the

implementation of integrated dual disorders treatment: An exploratory study. *Journal of Mental Health, 16*(6), 757—769. https://doi.org/10.1080/09638230701496402

Woodman, R. W. (2014). The role of internal validity in evaluation research on organizational change interventions. *Journal of Applied Behavioral Science, 50*(1), 40—49. https://doi.org/10.1177/00218861351613

Woudstra, M. H., van Rensberg, E. J., Visser, M., & Jordaan, J. (2018). Learner-to-teacher bullying as a potential factor influencing teachers' mental health. *South African Journal of Education, 38*(1), #1358. https://doi.org/10.15700/saje.v28n1a1358

Wunder, R. S., Dougherty, T. W., & Welsh, M. A. (1982). A causal model of role stress and employee turnover. *Academy of Management Proceedings (0065-0668)*, 297—301. https://doi.org/10.5465/ambpp.1982.4976707

Yang, C., Ma, A., & Hu, L. (2011). Job embeddedness: A new perspective to predict voluntary turnover. *National Business Review International, 12*(4), 418—446. https://doi.org/10.1108/20408741111178834

Yeager, K., & Roberts, A. (2015). *Crisis intervention handbook: Assessment, treatment, and research* (3rd ed.). Oxford Press.

Yeo, I. H., Kim, Y. Y., Kim, J. K., Lee, D. E., Choe, J. Y., Kim, C. H., Park, J. B., Seo, K. S., Park, S. Y., Lee, S. H., Cho, J. K, & Lee, S. H. (2021). Impact of the COVID-19 pandemic on emergency department workload and emergency care workers' psychosocial stress in the outbreak area. *Medicina (Kaunas, Lithuania),*

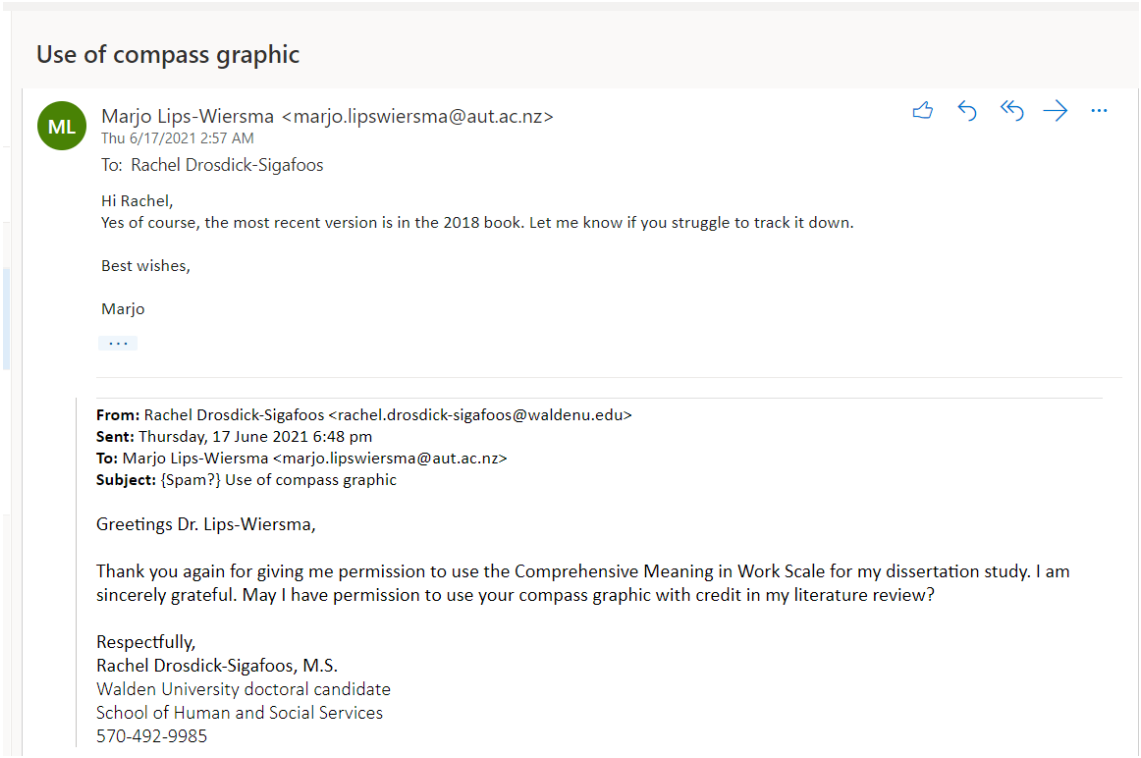
57(11), 1274. https://doi.org/10.3390/medicina57111274

Zarle, T. H., Hartsough, D. M., & Ottinger, D. R. (1974). Tornado recovery: The development of a professional-paraprofessional response to a disaster. *Journal of Community Psychology*, *2*(4), 311—320. https://doi.org/10.1002/1520-6629(197410)2:4<311::AID-JCOP2290020402>3.0.CO;2-P

Zgheib, N. B. (2019). Giving hope: Best healing power in medicine. *Marshall Journal of Medicine*, *5*(3), 5. https://doi.org/10.33470/2379-9536.1239

Zhao, M., Chen, G., Li, T., Sheng, C., Li, Y., & Han, Y. (2021). The impact of study setting on clinical characteristics in older Chinese adults with subjective cognitive decline: Baseline investigation of convenience and population-based sampling. *BioMed Research International*, 1—9. https://doi.org/10.1155/2021/5538323

Appendix A: Permission for Use of Meaning Work Compass



Use of compass graphic

ML

Marjo Lips-Wiersma <marjo.lipswiersma@aut.ac.nz>
Thu 6/17/2021 2:57 AM
To: Rachel Drosdick-Sigafoos

Hi Rachel,
Yes of course, the most recent version is in the 2018 book. Let me know if you struggle to track it down.

Best wishes,

Marjo

...

From: Rachel Drosdick-Sigafoos <rachel.drosdick-sigafoos@waldenu.edu>
Sent: Thursday, 17 June 2021 6:48 pm
To: Marjo Lips-Wiersma <marjo.lipswiersma@aut.ac.nz>
Subject: {Spam?} Use of compass graphic

Greetings Dr. Lips-Wiersma,

Thank you again for giving me permission to use the Comprehensive Meaning in Work Scale for my dissertation study. I am sincerely grateful. May I have permission to use your compass graphic with credit in my literature review?

Respectfully,
Rachel Drosdick-Sigafoos, M.S.
Walden University doctoral candidate
School of Human and Social Services
570-492-9985

Appendix B: Request to Disseminate Research Invitations

Dear [Insert Title],

My name is Rachel Drosdick-Sigafoos. I am a doctoral candidate with Walden University earning a Ph.D. in Human and Social Services with a Disaster, Crisis, and Intervention specialization. I am also a psychiatric crisis clinician and Student Assistance Program liaison with Children's Service Center in Wilkes-Barre, Pennsylvania.

My dissertation is titled, "Hope's moderating effects on crisis workers' meaning in work and turnover intentions." I am conducting a quantitative, cross-sectional research study to understand whether hope changes the likelihood that workers who feel their work is very meaningful are less likely to consider leaving their jobs.

With your approval and partnership, I ask that you consider sharing my research survey with employees in your crisis and emergency care department(s). I will be gathering responses from emergency department doctors, nurses, and techs, psychiatric crisis workers, inpatient psychiatric direct care workers, pre-hospital medical personnel, CPS investigators, CYS intake workers, domestic violence shelter advocates, helpline operators, and emergency management personnel.

Survey responses will be completely confidential. Respondents will not be asked to share any personal identification information, like their name or date of birth, though they will be asked to define their job role, gender, and years of experience. To protect respondents from smaller departments, I am not asking participants to name their employers. The survey will take about 10 minutes to finish. Participants can choose to

stop the study at any time. I will share a results summary with all participating organizations.

With your approval, I will send your identified contact person three emails to be shared with eligible staff: at the beginning of the data collection period, one week into the data collection period, and three days before the data collection period close.

To ensure this research study is ethical and scientifically sound, Walden's Institutional Review Board (IRB) will review my application to conduct the study. If you have any questions about this process, please contact IRB@mail.waldenu.edu. Upon approval, I will provide all participating organizations with the IRB approval number.

Please contact me with questions at my office, 570-825-6425 x525 or Rachel.Drosdick-Sigafoos@waldenu.edu. To confirm your organization's intent to distribute the survey, please click here.

Thank you for your consideration!

Sincerely,

Rachel Drosdick-Sigafoos

Walden University doctoral candidate

Appendix C: Flyer Invitation to Participate

Greetings,

You are invited to participate in a 10-minute survey for people who work in crisis environments. Your participation is confidential and your employer will not have access to your personal results nor will you be asked to identify your employer.

This research study examines professionals' meaning in work, hope, and plans to leave their current job. If you are interested in learning more about this research project or participating, please click here.

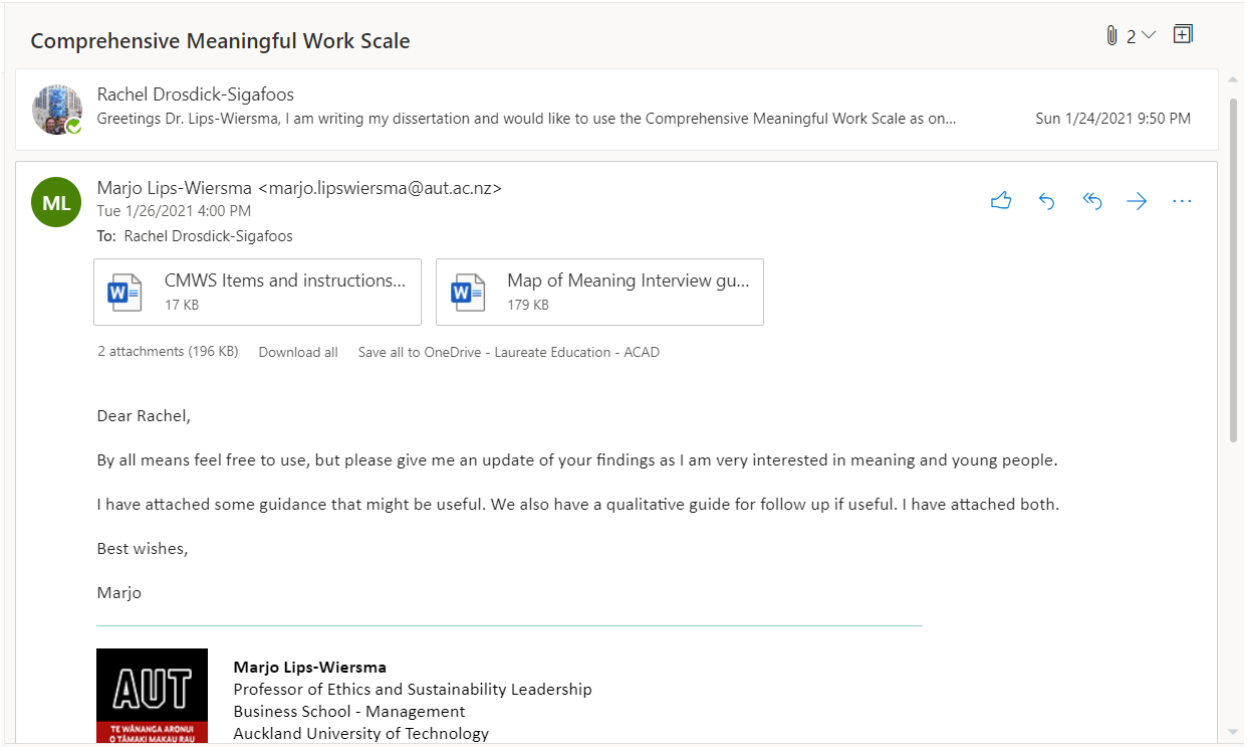
Thank you for your time and thank you for the care you provide to people during what may be the most challenging times of their lives!

Appendix D: Demographics Form

1. Age:
2. Gender:
    a. Male
    b. Female
    c. Nonbinary
    d. Prefer not to say
3. Occupation (if you do more than 1 of these, please select the position where you spend the most work time):
    a. Psychiatric crisis clinician
    b. Psychiatric inpatient worker
    c. EMT/EMS
    d. Emergency department medical provider
    e. Emergency response personnel
    f. Domestic violence shelter advocate
    g. Child welfare worker
    h. Hospice care
4. Total years in human-serving field
5. Years in current position
6. Highest level of education completed
    a. High school or GED
    b. Associate’s degree

   c. Bachelor's degree
   d. Master's degree
   e. Terminal degree (M.D., D.O., Ph.D., Psy.D., etc.)
7. Marital status
   a. Single
   b. Partnered
   c. Married
   d. Divorced
   e. Widowed
8. Your approximate total income (not household income)
9. Do you supervise others through the course of your crisis work?
   a. Yes
   b. No

Appendix E: Comprehensive Meaning in Work Scale Permission for Use



Comprehensive Meaningful Work Scale

2

Rachel Drosdick-Sigafoos
Greetings Dr. Lips-Wiersma, I am writing my dissertation and would like to use the Comprehensive Meaningful Work Scale as on... Sun 1/24/2021 9:50 PM

ML

Marjo Lips-Wiersma <marjo.lipswiersma@aut.ac.nz>
Tue 1/26/2021 4:00 PM
To: Rachel Drosdick-Sigafoos

CMWS Items and instructions...
17 KB

Map of Meaning Interview gu...
179 KB

2 attachments (196 KB) Download all Save all to OneDrive - Laureate Education - ACAD

Dear Rachel,

By all means feel free to use, but please give me an update of your findings as I am very interested in meaning and young people.

I have attached some guidance that might be useful. We also have a qualitative guide for follow up if useful. I have attached both.

Best wishes,

Marjo

AUT
TE WĀNANGA ARONUI O TĀMAKI MAKAU RAU

Marjo Lips-Wiersma
Professor of Ethics and Sustainability Leadership
Business School - Management
Auckland University of Technology

Appendix F: Comprehensive Meaning in Work Scale

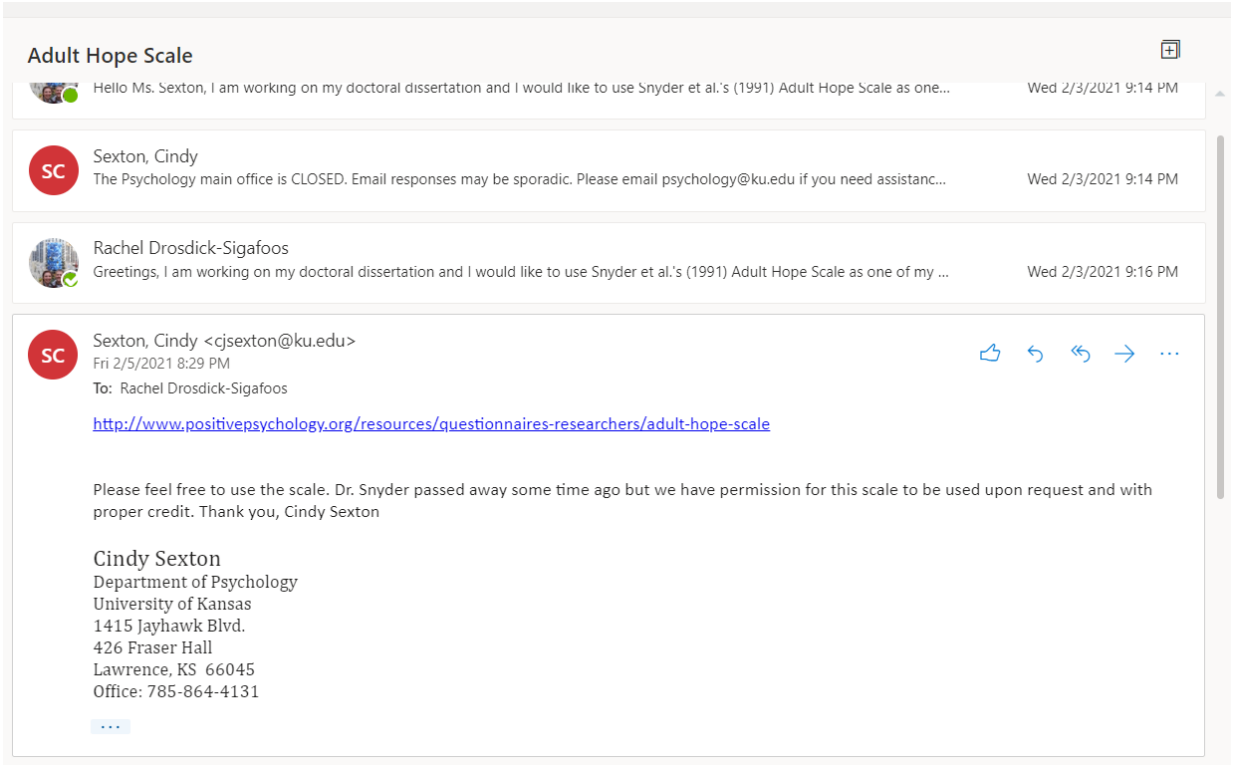
Please respond with reference to your current workplace only.

	Never/hardly ever	Seldom	Sometimes	Often	Always
I have a sense of belonging.	○	○	○	○	○
I can talk openly about my values when we are making decisions.	○	○	○	○	○
We talk about what matters to us.	○	○	○	○	○
We support each other.	○	○	○	○	○
We reassure each other.	○	○	○	○	○
We enjoy working together.	○	○	○	○	○
I feel I truly help our clients.	○	○	○	○	○
We contribute to products and services that enhance human well-being.	○	○	○	○	○
What we do is worthwhile.	○	○	○	○	○
We spend a lot of time on things that are truly important.	○	○	○	○	○
I create and apply new ideas or concepts.	○	○	○	○	○

I make a difference that matters to others.	○	○	○	○	○
I experience a sense of achievement.	○	○	○	○	○
I am excited by the available opportunities to me.	○	○	○	○	○
At work, my sense of what is right and wrong gets blurred.	○	○	○	○	○
I don't like who I am becoming at work.	○	○	○	○	○
At work, I feel divorced from myself.	○	○	○	○	○
At work, we face up to reality.	○	○	○	○	○
We are tolerant of being human.	○	○	○	○	○
We recognize that life is messy and that is okay.	○	○	○	○	○
I feel inspired at work.	○	○	○	○	○
The work we are doing makes me feel hopeful about the future.	○	○	○	○	○
The vision we collectively work toward inspires ms.	○	○	○	○	○

I experience a sense of spiritual connection with my work.	◯	◯	◯	◯	◯
In this work, I have the time and space to think.	◯	◯	◯	◯	◯
We have a good balance between focusing on getting things done and noticing how people are feeling.	◯	◯	◯	◯	◯
I create enough space for me.	◯	◯	◯	◯	◯
I have a good balance between the needs of others and my own needs.	◯	◯	◯	◯	◯

Appendix G: Adult Hope Scale Permission for Use



Adult Hope Scale

Hello Ms. Sexton, I am working on my doctoral dissertation and I would like to use Snyder et al.'s (1991) Adult Hope Scale as one... Wed 2/3/2021 9:14 PM

SC Sexton, Cindy
The Psychology main office is CLOSED. Email responses may be sporadic. Please email psychology@ku.edu if you need assistanc... Wed 2/3/2021 9:14 PM

Rachel Drosdick-Sigafoos
Greetings, I am working on my doctoral dissertation and I would like to use Snyder et al.'s (1991) Adult Hope Scale as one of my ... Wed 2/3/2021 9:16 PM

SC Sexton, Cindy <cjsexton@ku.edu>
Fri 2/5/2021 8:29 PM
To: Rachel Drosdick-Sigafoos

http://www.positivepsychology.org/resources/questionnaires-researchers/adult-hope-scale

Please feel free to use the scale. Dr. Snyder passed away some time ago but we have permission for this scale to be used upon request and with proper credit. Thank you, Cindy Sexton

Cindy Sexton
Department of Psychology
University of Kansas
1415 Jayhawk Blvd.
426 Fraser Hall
Lawrence, KS 66045
Office: 785-864-4131

Appendix H: Adult Hope Scale

	Definitely false	Mostly false	Mostly true	Definitely true
I can think of many ways to get out of a jam.	◯	◯	◯	◯
I energetically pursue my goals.	◯	◯	◯	◯
I feel tired most of the time.	◯	◯	◯	◯
There are a lot of ways around any problem.	◯	◯	◯	◯
I am easily downed in an argument.	◯	◯	◯	◯
I can think of many ways to get the things in life that are important to me.	◯	◯	◯	◯
I worry about my health.	◯	◯	◯	◯
Even when others get discouraged, I know I can find a way to solve the problem.	◯	◯	◯	◯
My past experiences have prepared me well for my future.	◯	◯	◯	◯
I've been pretty successful in life.	◯	◯	◯	◯
I usually find myself worrying about something.	◯	◯	◯	◯
I meet the goals I set for myself.	◯	◯	◯	◯

Appendix I: Cohen's Turnover Intention Scale Permission for Use

PsycTESTS

Turnover Intention Scale

Note: Test name created by PsycTESTS

PsycTESTS Citation:
Cohen, A. (1999). Turnover Intention Scale [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/t10116-000

Instrument Type:
Rating Scale

Test Format:
Turnover Intention Scale responses are rated on a scale from 1 (strongly agree) to 5 (strongly disagree).

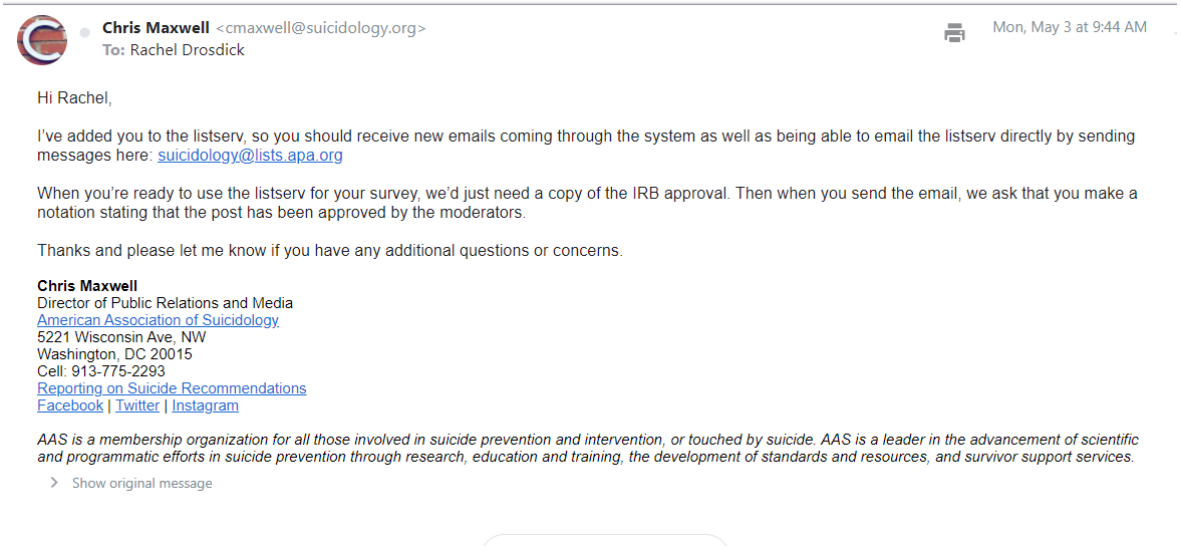
Source:
Cohen, Aaron. (1999). The relation between commitment forms and work outcomes in Jewish and Arab culture. Journal of Vocational Behavior, Vol 54(3), 371-391. doi: https://dx.doi.org/10.1006/jvbe.1998.1669, © 1999 by Elsevier. Reproduced by Permission of Elsevier.

Appendix J: Turnover Intention Scale

Cohen's Turnover Intention Scale

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I think a lot about leaving the organization.	○	○	○	○	○
I am actively searching for an alternative to the organization.	○	○	○	○	○
As soon as it is possible, I will leave the organization.	○	○	○	○	○
I think a lot about leaving the job.	○	○	○	○	○
I am actively searching for an alternative to the job.	○	○	○	○	○
As soon as it is possible, I will leave the job.	○	○	○	○	○
I think a lot about leaving the occupation.	○	○	○	○	○
I am actively searching for an alternative to the occupation.	○	○	○	○	○
As soon as it is possible, I will leave the occupation.	○	○	○	○	○

Appendix K: American Association of Suicidology Listserv Distribution Agreement



Chris Maxwell <cmaxwell@suicidology.org>
To: Rachel Drosdick

Mon, May 3 at 9:44 AM

Hi Rachel,

I've added you to the listserv, so you should receive new emails coming through the system as well as being able to email the listserv directly by sending messages here: suicidology@lists.apa.org

When you're ready to use the listserv for your survey, we'd just need a copy of the IRB approval. Then when you send the email, we ask that you make a notation stating that the post has been approved by the moderators.

Thanks and please let me know if you have any additional questions or concerns.

Chris Maxwell
Director of Public Relations and Media
American Association of Suicidology
5221 Wisconsin Ave, NW
Washington, DC 20015
Cell: 913-775-2293
Reporting on Suicide Recommendations
Facebook | Twitter | Instagram

AAS is a membership organization for all those involved in suicide prevention and intervention, or touched by suicide. AAS is a leader in the advancement of scientific and programmatic efforts in suicide prevention through research, education and training, the development of standards and resources, and survivor support services.

> Show original message