

EFFECTS OF COVID-19 ON MENTAL HEALTH WORKERS' JOB SATISFACTION,  
EMPLOYEE BURNOUT, AND INTENT TO LEAVE

by

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## ABSTRACT

The COVID-19 disease emerged in December 2019 and created a worldwide pandemic. As the COVID-19 virus spread, healthcare workers faced increased workloads and burnout due to increased stress. With a current abundance of research to better understand how the pandemic affected healthcare workers, minimal research has been conducted to investigate the effects on mental health workers. It is imperative to better understand how the consequences of the pandemic affected mental health workers due to their importance in supporting the mental well-being of our communities. This study focused on how the COVID-19 pandemic influenced job satisfaction, burnout syndrome, and intent to leave in mental health workers before and after the first 3 years of the COVID-19 pandemic. Using an online survey format on JotForm, 103 mental health professionals completed an online survey to measure job satisfaction, burnout syndrome, and intent to leave before and after the first 3 years of the COVID-19 pandemic. The results of the one-way repeated measures MANOVA showed a statistically significant difference in levels of job satisfaction, burnout syndrome, and intent to leave before and after the first 3 years of the COVID-19 pandemic. Results of the multiple linear regression indicated the COVID-19 pandemic did not act as a significant moderator for the relationship between job satisfaction and intent to leave, but did for the relationship between burnout and intent to leave. Implications encourage increased support for mental health workers because of the pandemic. Recommendations for future research are continued efforts in studying how the COVID-19 pandemic affects mental health employees, as well as other professions.

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## CHAPTER 1: INTRODUCTION TO THE STUDY

### **Introduction**

Healthcare workers (e.g., medical and mental health) across the world have always been the backbone of health and wellness for communities. The physically and mentally challenging nature of a healthcare worker's role is well known as a high stress profession often leading to burnout if not managed appropriately (Willard-Grace et al., 2019). On January 20, 2020, the Center for Disease Control confirmed the first laboratory-confirmed case of the COVID-19 virus, and by spring of 2020, the threat of the COVID-19 pandemic became a major and a true reality for the United States (Sheraton et al., 2020). The threat of the pandemic created a negative physical and psychological burden on people, creating or amplifying mental health symptoms, and inducing mild to severe illness or even death (Sheraton et al., 2020).

Growing infection rates of the COVID-19 virus placed a challenging workload onto the shoulders of the world's medical and mental health workers (Shoja et al., 2020). Healthcare workers experienced increased workloads, a higher census of patients, risk of contracting an infectious disease and insufficient resources in managing patients and clients during the pandemic (Cullen et al., 2020). Healthcare workers reported a lower ability to provide ethical treatment for individuals causing higher levels of stress and increased risk of burnout and low job satisfaction (Cullen et al., 2020; Shoja et al., 2020).

The abundance of research on the effects of the COVID-19 pandemic on medical healthcare workers has provided vital information on changes in job satisfaction, burnout, and retention rates. Minimal research has been conducted to investigate and learn of the effects of the pandemic on job satisfaction, burnout, and retention rates for mental health workers in the United States. It is imperative to better understand how the consequences of the COVID-19 pandemic



effected mental health workers, accounting for differing cultures, demographics, and regions because mental health workers are at the front lines of supporting the mental well-being of individuals effected both directly, and indirectly, by the COVID-19 virus. This study will focus on how the COVID-19 pandemic's influence on mental health employees in Western North Carolina, of the United States, affected job satisfaction, burnout syndrome, and intent to leave in mental health workers before and after the first 3 years of the COVID-19 pandemic.

## **Background**

### **COVID-19**

The COVID-19 disease emerged in December 2019, from a lab in Wuhan, China, and spread rapidly throughout the world (Sheraton et al., 2020). The spread of the virus created a deadly worldwide pandemic while also altering worldwide economic and governmental functions (Sheraton et al., 2020). As the COVID-19 virus infection rates rose, healthcare workers faced increased workloads, pressure to manage the high influx of patients, and burnout due to increased stress and pressure (Shoja et al., 2020). One in five frontline healthcare workers reported increased anxiety and/or depression due to the added occupational stress during the pandemic (Muller et al., 2020). Additionally, two in five healthcare workers reported insomnia and sleep problems compared to non-healthcare workers, due to pandemic related effects (Muller et al., 2020).

From the beginning of the pandemic, many public operating procedures changed to ensure the safety of citizens (Pfefferbaum & North, 2020). Common safety tactics used to increase safety included public quarantine, mask mandates, social distancing, and martial law (Pfefferbaum & North, 2020). The consistent changes of normal daily living (e.g. quarantining, masks, lack of socialization) proved to be challenging for communities from a physical and

mental well-being standpoint (Pfefferbaum & North, 2020). The negative psychological effects of those safety measures included individuals experiencing increased anxiety, fear, panic, depression and increased suicidal tendencies (Moutier, 2021; Zhao et al., 2020).

The changes to daily living faced during the COVID-19 pandemic had a direct negative effect on the mental health and well-being of individuals (Fiorillo & Gorwood, 2020; Wang et al., 2021). Communities experienced an increase in negative mental health symptoms due to the pandemic and the financial stress caused by immediate economic impact (Bao et al., 2020; Rajkumar, 2020; Shigemura et al., 2020; Zandifar & Badrfam, 2020). The increase in mental health needs placed consistent hardship on mental health workers tasked with treating the negative mental health effects caused by the pandemic (Rajkumar, 2020).

### **Job Satisfaction**

Job satisfaction of an employee is described by the levels of satisfaction and happiness an employee receives from their job (Batista & Reio, 2019). Job satisfaction is commonly tied to ability to complete job tasks, ability to learn, gain knowledge while on the job, and forming and engaging in positive workplace relationships (Batista & Reio, 2019; Eliyana et al., 2019). Job satisfaction demonstrates an employee's positive view of the job characteristics, the quality of work, organizational evaluations, and often results in a positive view of the organization with high organizational commitment (Badrianto & Ekhsan, 2020; Hidayah & Tobing, 2018).

A study completed by Herzberg, Mausner and Snyderman, in 1959, developed the two-factor model of work motivation leading to the development of the motivation-hygiene theory (or two-factor theory) (Alshmemri et al., 2017). Herzberg's motivation-hygiene theory states job satisfaction is affected by two main factors, intrinsic and extrinsic factors, which can dictate the development of the employee's level of job satisfaction (Alshmemri et al., 2017; Hidayah &

Tobing, 2018). Intrinsic factors are defined as job-related factors contributing to an employee's level of job satisfaction, while extrinsic factors focus on environmental factors (Wernimont, 1966).

### **Employee Burnout**

The demands and challenges of healthcare workers are always high and as a result, healthcare employees report experiencing higher levels of occupational burnout (Willard-Grace et al., 2019). In the healthcare field, approximately 76% of employees have reported experiencing burnout within their career (Gabriel & Aguinis, 2021). Burnout syndrome is commonly defined as an employee feeling emotionally drained/exhausted, feelings of negativity towards the organization and co-workers, and becoming heavily detached from the job (Gabriel & Aguinis, 2021; Maslach & Jackson, 1981). Burnout often results in a decline in job satisfaction, job performance, and motivation for the employee (Gabriel & Aguinis, 2021; Maslach & Jackson, 1981; Neshor Shoshan & Sonnentag, 2019). Healthcare professionals are consistently exposed to elevated levels of occupational stress leading to increased burnout, lower job satisfaction, decreased motivation, and increased risk for turnover (Mahoney et al., 2020).

### **Biblical Foundation**

From a biblical perspective, it is important to understand how God directs us to handle a pandemic, the experience of burnout and the need to understand the trials of others during difficult times. The first major necessity taught during the COVID-19 pandemic is the need for salvation through Christ as Lord and Savior because no one is guaranteed another day on earth. The Bible states in 2 Corinthians 5:17, "Therefore, if anyone is in Christ, he is a new creation. The old has passed away; behold, the new has come," and then in John 14:6, "I am the way, and the truth, and the life. No one comes to the Father except through me" (*English Standard Version*

*Bible*, 2001). It is through Jesus our souls are saved and renewed with an opportunity to enter the kingdom of God.

Part of a renewal is being able to manage difficult times in life, such as a pandemic, or difficulties within a job. During those times the Bible teaches us to trust the Lord, and trust He will be a light and guiding presence in life. To trust in the Lord first comes through the building of a relationships with Him through prayer and scripture. God encourages all Christians to build a relationship using his word, and 2 Timothy 3:17 encourages us in this area by stating, “All Scripture is breathed out by God and profitable for teaching, for reproof, for correction, and for training in righteousness, that the man of God may be competent, equipped for every good work” (*English Standard Version Bible*, 2001).

### **Problem Statement**

The SARS-CoV-2 (COVID-19 disease) is a strain of coronavirus having over 422 million confirmed positive cases and over 5.8 million deaths globally reported by the World Health Organization. The pandemic led to increased safety procedures, such as public quarantine, mask mandates, social distancing, intense COVID-19 testing, and work shutdowns, which caused indefinite changes to the daily living to citizens (Pfefferbaum & North, 2020). Due to those changes, the onset of negative psychological effects such as increased anxiety, fear, panic, depression and increased suicidal tendencies increased (Fiorillo & Gorwood, 2020; Moutier, 2021; Wang et al., 2021; Zhao et al., 2020).

The increased workload on healthcare workers due to the rise in medical and mental health treatment needs proved challenging to provide adequate care (de Lima et al., 2020; Sharma et al., 2020; Sheraton et al., 2020; Shoja et al., 2020). Healthcare workers became high-risk for psychological distress (e.g. anxiety, depression, sleep problems), increased occupational

stress, and feelings of occupational burnout (Ma, 2021; Muller et al., 2020; Ng et al., 2020; Shoja et al., 2020). Healthcare employees who experience burnout exhibit a decline in performance, lower levels of job satisfaction and motivation, and are more likely to contemplate quitting their job or leaving their field (Carolan & O de Visser, 2018; Mahoney et al., 2020; Scanlan & Still, 2019).

The COVID-19 pandemic has created an occupational hardship on mental health workers in the United States (Rajkumar, 2020). To this date, minimal research has been completed in the United States examining the effects of the COVID-19 pandemic on mental health workers, and no research has been conducted on those effects on mental health workers in North Carolina. Because of this there is a need to understand the factors leading to occupational hardships of the pandemic's effect on job satisfaction, burnout, and intent to leave of mental health workers.

### **Purpose of the Study**

The purpose of this quantitative casual-comparative study is to investigate the 3-year influence of the COVID-19 pandemic on job satisfaction, burnout syndrome, and intent to leave in mental health workers before and after the first 3 years of the COVID-19 pandemic. Furthermore, this study examined whether the timeframe prior to the onset of the COVID-19 pandemic and three years post-pandemic had a moderating effect on the relationships between job satisfaction and intent to leave, as well as the relationship between burnout and intent to leave among mental health professionals. The population for this study is mental health workers in Western North Carolina. The results of this study may be used to increase retention of mental health workers thereby providing more consistent and effective mental health services.

## **Research Questions and Hypotheses**

### **Research Questions**

RQ1: What is the difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic?

RQ2: What moderating effect did the COVID-19 pandemic have on the relationship between job satisfaction and burnout syndrome on intent to leave?

### **Hypotheses**

Null Hypothesis 1: There is no difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic.

Alternative Hypothesis 1: There is a difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic.

Null Hypothesis 2: The COVID-19 pandemic does not have a moderating effect on the relationship between job satisfaction and intent to leave.

Alternative Hypothesis 2: The COVID-19 pandemic does have a moderating effect on the relationship between job satisfaction and intent to leave.

Null Hypothesis 3: The COVID-19 pandemic does not have a moderating effect on the relationship between burnout syndrome and intent to leave.

Alternative Hypothesis 3: The COVID-19 pandemic does have a moderating effect on the relationship between burnout syndrome and intent to leave.

### **Assumptions and Limitations of the Study**

#### **Assumptions**

Assumptions within a research study are the beginning foundations enabling the creation and justification for conducting the study through the beliefs of the researcher and the proposed research topic. The first assumption of the study is the pandemic has had a negative effect on job satisfaction, increased burnout, and intent to leave in mental health workers, based on prior research of healthcare workers (Alrawashdeh et al., 2021; Arifin, 2019; Carolan & O de Visser, 2018). A second assumption made is each participant who engages in the online survey gave honest, and retrospectively accurate, answers about their experience prior to the COVID-19 pandemic, as well as their current experiences during the COVID-19 pandemic. A third assumption is the chosen quantitative research design is an effective and appropriate design for this study. A fourth assumption is the chosen measurement tools for job satisfaction, burnout, and intent to leave would provide valid and reliable data for analysis.

#### **Limitations**

Limitations within a research study are defined as constraints or barriers beyond the control of the researcher that could affect the completion and outcome of the research study, commonly originating from research design and methodology. The first limitation within this study is the selected population only represents a partial reflection of mental health employees in the state of North Carolina, and the country of the United States of America. An additional limitation is the potential for the participant's questionnaire answers for current experience (state of job satisfaction, burnout, and intent to leave) to skew the pre-COVID pandemic reflective

answers. Additionally, the potential for the questionnaire answers to be skewed and inaccurate would limit the ability to make the results of the study generalizable for the variables and the population studied.

## **Theoretical Foundations of the Study**

### **Motivation-Hygiene Theory**

The first theoretical foundation used in this study comes from a study completed by Herzberg, Mausner and Snyderman (1959) that developed the two-factor model of work motivation leading to the development of the motivation-hygiene theory (or two-factor theory) (Alshmemri et al., 2017). Herzberg's motivation-hygiene theory has been a highly utilized theory for testing job satisfaction, as well as being a popular tool for testing job satisfaction in healthcare workers (Alshmemri et al., 2017). The motivation-hygiene theory operates based on the concept of two present motivating factors affecting job satisfaction for an employee, intrinsic, and extrinsic factors (Alshmemri et al., 2017; Wernimont, 1966).

Herzberg et al. (1959) described intrinsic factors as operating to increase job satisfaction while extrinsic factors worked to lessen an employee's job dissatisfaction (Alshmemri et al., 2017). Research has been conducted to understand the importance placed by employees on intrinsic and extrinsic factors, and how those factors effect job satisfaction (Huang & Van De Vliert, 2003). Both intrinsic and extrinsic factors are positively related to the level of job satisfaction experienced by an employee, but an additional third found is the employee's personal value placed on each factor (Dunnette et al., 1967; Huang & Van De Vliert, 2003; Mottaz, 1985). The two motivation factors of job satisfaction are frequently used in questionnaires to measure and assess levels of job satisfaction in employees (Huang & Van De Vliert, 2003).



### **Job Demands-Resources Model**

The second theoretical foundation is the job demands-resources (JD-R) model used to address occupational health and employee well-being (Demerouti et al., 2001; Lesener et al., 2018). The JD-R model is a common theory used for understanding and exploring occupational burnout syndrome in employees (Demerouti et al., 2003). The JD-R model states burnout arises when a person, or employee, experiences increasing job demands and feel they have inadequate resources to cope and manage those high demands (Demerouti et al., 2001; Maslach & Leiter, 2016). The central foundation of the JD-R focuses on the working conditions of any occupation being considered universal job demands and job resources (Lesener et al., 2018) This foundational core of the model allows applicability to general working conditions to detect the consequences specific to occupational environmental stressors (Demerouti et al., 2001; Lesener et al., 2018).

### **Biblical Foundations**

The first biblical foundation used in this study is understanding the human need for salvation through Christ. Disasters often serve as reminders peace can be found through God because He provides the knowledge, strength, and comfort through His presence. If someone's relationship with God is struggling, or no sought after, natural disasters such as a pandemic can provide an opportunity to rekindle, or seek, a relationship with God. Through forming of a relationship, the pandemic could serve as an opportunity to create oneself anew through accepting, or reaching out to, Christ and allowing Him to provide truths and comfort through scripture, prayer, and salvation. This is seen in the Bible in 2 Corinthians 5:17, "Therefore, if anyone is in Christ, he is a new creation. The old has passed away; behold, the new has come," and then in Philippians 4:6-7, "Do not be anxious about anything, but in everything by prayer

and supplication with thanksgiving let your requests be made known to God. And the peace of God, which surpasses all understanding, will guard your hearts and your minds in Christ Jesus” (*English Standard Version Bible*, 2001).

The second major foundation found in the Bible used in the study is the ability to learn through trials. In life lessons must be learned to trust the Lord and use God’s word to find satisfaction and joy in the world, not through material and worldly ideals. God speaks to this in Proverbs 3:5, “Trust in the Lord with all your heart, and do not lean on your own understanding,” (translation) and Jeremiah 29:11, “For I know the plans I have for you, declares the Lord, plans for welfare and not for evil, to give you a future and a hope” (*English Standard Version Bible*, 2001).

### **Definition of Terms**

The following is a list of definitions of terms used in this study.

**COVID-19** – A strain of coronavirus that is an enveloped, positive single-stranded large RNA virus, and can infect humans or animals (Velavan & Meyer, 2020).

**Pandemic** – An event involving the explosive transmissibility of an infectious disease prevalent throughout a large area (Morens et al., 2009).

**Job Satisfaction** – The levels of happiness an employee receives from their job characteristics, the quality of work and the evaluation from the employer (Eliyana et al., 2019; Hidayah & Tobing, 2018).

**Employee Burnout** – When an employee feels emotionally drained, negative towards their organization and co-workers, heavy detachment from job tasks, and a decline in job satisfaction, job performance, and motivation (Gabriel & Aguinis, 2021).

**Intent to Leave** - The intent of an employee to leave their job or organization (Bothma & Roodt, 2013).

### **Significance of the Study**

The potential findings in this study could provide additional insight into the research of understanding the effects of the COVID-19 pandemic on the job satisfaction, risk of burnout, and turnover intention for mental health workers in the Western region of North Carolina. The additional research could provide additional theoretical insight to Herzberg's (1959) motivation-hygiene theory through gained knowledge of how the COVID-19 pandemic affected, and continues to affect, the job satisfaction of mental health workers. Additionally, the job demands-resources (JD-R) model focuses on understanding burnout through increased job demands, and this study addresses the increased job demands on mental health workers due to the COVID-19 pandemic. The results of this research could potentially provide additional theoretical insight into how pandemics and large-scale disasters increase burnout due to job demands of mental health employees increasing due to association with the event.

This study could also provide crucial insight into the importance of supporting employees through managing symptoms of burnout due to the COVID-19 pandemic. The COVID-19 pandemic created a difficult working environment for many mental health employees and the effects on job satisfaction, burnout, and retention can also be a detriment to organizations. This research could offer insight into how organizations can support mental health employees through future pandemics by utilizing increased supervisory training for burnout awareness, incentives to assist in maintaining job satisfaction, and organizational supports to help prevent mental health workers from leaving the career by promoting importance of self-care and adequate coping of high occupational stress. Through these supports for mental health workers, this study can also

highlight the potential positive social impact such as improved care/treatment for mental health clients, increased positive overall treatment outcomes, and increased access to mental health care as a result of more mental health workers remaining in the profession. This study also looked at any organizational outcomes benefiting both the organization and mental health workers, such as increased retention from better understanding burnout and job satisfaction, and lowering burnout through a proactive approach focusing on employee job satisfaction.

### **Summary**

The COVID-19 pandemic placed a heavy burden on many people and caused them to learn how to manage new ways of living life, while remaining safe and healthy. The negative effects of the pandemic placed a strain on the physical and mental health of many communities, and conversely translated to increased stress for healthcare workers. Medical healthcare workers became the spotlight for research on the negative effects of the pandemic on healthcare workers, but mental health workers may have experienced those same hardships. The need to address mental health issues increased due to the pandemic and mental health employees becoming at higher risk of experiencing burnout syndrome, low job satisfaction, and increasing intent to leave the profession. This study may find employee burnout is a detriment to the job satisfaction and overall well-being of employees and organizations.

This research study is aimed to better understand how the COVID-19 pandemic influenced overall job satisfaction, risk of burnout syndrome, and intent to leave in mental health workers, specifically in the Western region of North Carolina. The aim of the study is to help mental health workers understand the effects of the pandemic and the importance of self-care and adequate coping of high occupational stress. Additionally, this research aims to educate employers on the need to place an emphasis on providing adequate support for mental health

workers to help them maintain job satisfaction, avoid burnout, and maintain employment within the profession.

## CHAPTER 2: LITERATURE REVIEW

### Overview

The infectious disease COVID-19 spread rapidly across the globe, creating a pandemic changing how the world operated from business down to how families lived their everyday lives (Sheraton et al., 2020). COVID-19 created a major threat to the lives of every citizen in the world, as well as how the economy and government of the world function (Sheraton et al., 2020). By January 30th, 2020, the World Health Organization declared the outbreak of COVID-19 as a public health emergency due to the virus's high transmission rate and the virus's 2% mortality rate (Shoja et al., 2020). With the growing infection rate of the COVID-19 virus rising by the month, healthcare workers began to face increased workloads, pressure to manage the high influx of patients, and many healthcare workers began to report burnout due to the increased stress and pressure (Shoja et al., 2020).

Employee burnout is identified has a major symptom and consequence of occupational stress and employees often report negative physical and mental effects (Anand, 2019). Employee burnout can wreak havoc on the employee's overall well-being, individual emotional intelligence, self-efficacy, as well as their families, co-workers, and the organization (Anand, 2019; Kanfer et.al, 2012). Organizational consequences to burnout are a costly burden by increasing the costs of hiring and training due to poor employee performance and increased turnover (Kalshoven & Boon, 2012). Additionally, employers report higher employee benefit costs as a consequence of burnout which causes lower quality of physical and mental health care options for employees (Kalshoven & Boon, 2012).

Pandemics caused by infectious diseases are known to create high levels of psychological distress and can play a decisive role in the decrease of an individual's mental health state (Cullen

et al., 2020). During the COVID-19 pandemic, mental health workers expressed concerns about their ability to adequately treat patients due to insufficient resources (Cullen et al., 2020). The lack of resources placed a strain on many mental health workers and subsequently increased occupational stress levels (Cullen et al., 2020; Prasetya et al., 2021).

When any healthcare worker experiences burnout syndrome, there is a link to a decrease in job satisfaction, motivation, and a drastic increase in turnover (Mahoney et al., 2020; Prasetya et al., 2021). Burnout and increased turnover in healthcare facilities not only have been reported as costly, but also have a negative impact on the clients with whom they serve (Scanlan & Still, 2019). Job demands continue to increase in the mental health profession due to the everchanging characteristics and expectations of the COVID-19 pandemic (Scanlan & Still, 2019). It is imperative to the mental health stability of the nation to explore how the COVID-19 pandemic has affected the job satisfaction, contribution to burnout, and intention to leave for mental health workers.

The goal of this literature review is to examine the overall effects of the COVID-19 pandemic on healthcare workers to identify the gap in research specifically for mental health workers. This literature review contains information on research to gain a deeper understanding of the COVID-19 pandemic's effect on healthcare workers. The review explored how COVID-19 has changed regulations and operating procedures experienced by healthcare workers. Additionally, the review examined literature about how the pandemic has affected the job satisfaction, burnout, and intent to leave in healthcare workers, with a specific target population of mental health workers.

### Description of Search Strategy

Within this literature review, the key topics I aim to research are a) the COVID-19 pandemic, b) effects of the COVID-19 pandemic on healthcare workers, c) job satisfaction in healthcare, d) employee burnout in healthcare workers, e) turnover retention in healthcare, and f) how the COVID-19 pandemic has overall affected the job satisfaction, risk for burnout and intent to leave in healthcare workers. The COVID-19 pandemic is a newer, but popular, topic of study due to the nature of the virus's severity. Substantial amounts of research have been completed to better understand the virus, and the effects on people in many different facets of life. Job satisfaction, employee burnout, and turnover intention are three highly studied occupational topics. Research consistently investigates how job satisfaction is established and impacted, how burnout syndrome occurs, and causes of turnover intention in the healthcare field. The goal of this review and study is to better understand how the addition of a new variable, the COVID-19 pandemic, has affected the job satisfaction, the potential risk for burnout, and intent to leave for mental health employees and not just healthcare workers in general.

I used a large variety of data bases within the research and development of this project. The databases used within the project were Google Scholar, PsycARTICLES, Psycinfo, GALE Ebooks, EBSCO, ProQuest, Jerry FalWell Online Library and Online Wiley Library. The keywords used for searching these databases included *COVID-19 pandemic*, *effects of COVID-19 pandemic*, *effects of COVID-19 pandemic on healthcare workers*, *effects of COVID-19 pandemic on mental health workers*, *job satisfaction*, *job satisfaction of healthcare workers*, *job satisfaction of mental health workers*, *effects of COVID-19 pandemic on job satisfaction*, *effects of COVID-19 pandemic on healthcare job satisfaction*, *employee burnout*, *employee burnout of healthcare workers*, *employee burnout of mental health workers*, *effects of COVID-19 pandemic*



*on employee burnout, effects of COVID-19 pandemic on healthcare worker burnout, turnover intention, turnover intention of healthcare workers, turnover intention of mental health workers, effects of COVID-19 pandemic on turnover intention, effects of COVID-19 pandemic on healthcare worker turnover intention.* Four major themes were identified and utilized during this search: a) COVID-19 effects on individuals and healthcare workers, b) job satisfaction (COVID-19 & healthcare workers), c) employee burnout (COVID-19 & healthcare workers), and d) turnover intention (COVID-19 & healthcare workers).

When developing the biblical foundation of this study, the English Standard Version of the Bible was used for references to scripture. Additionally, theoretical foundations used in the texts of Sproul (2000) and Wolters (2005) were used to lay out biblical foundations for shaping foundational truths of the grand narrative of God for biblical perspectives concerning worldly events.

## **Review of Literature**

### **COVID-19**

#### ***Defining COVID-19***

The SARS-CoV-2 (COVID-19 disease) is an enveloped, positive single-stranded large RNA virus that can infect humans, or animals (Sheraton et al., 2020). Coronaviruses were originally described in 1966 by being cultivated from the individuals who have the common cold (Velavan & Meyer, 2020). The current strand commonly known as COVID-19 is 96% identical to a coronavirus from a bat, and SARS-CoV-2 succeeded in being the first strand to transition from animals to humans (Velavan & Meyer, 2020). The spread of the COVID-19 disease continued to grow as the World Health Organization reported as of February 2022, there were over 422 million confirmed cases of COVID-19 reported, and over 5.8 million deaths globally.

### *Effects of COVID-19 on Communities*

From the beginning of the pandemic, to combat the growing infection and death rates, world leaders have consistently altered public operating procedures to ensure the safety of citizens using tactics such as public quarantine, mask mandates, social distancing, and martial law (Pfefferbaum & North, 2020). The consistent changes of normal daily living experienced by the citizens of the world during the pandemic proved to be challenging for communities from a physical and mental well-being standpoint (Pfefferbaum & North, 2020). COVID-19 also brought on an onslaught of psychological attacks which ranged from increased anxiety, fear and panic due to the increase in prohibition techniques to slow the spread (Zhao et al., 2020). The ever-present threat of the COVID-19 virus provided an additional negative effect on individual mental health due to the threat of obtaining the virus, fear of death, experiences of a loved one's death and the change in daily living routines (e.g. quarantining, masks, lack of socialization) (Fiorillo & Gorwood, 2020).

The aftermath of the initial emergence of COVID-19 brought many countries to a standstill, as governments enforced strict quarantining measures, social distancing and minimal social interactions to avoid spreading the virus (Pfefferbaum & North, 2020). Due to lack of socialization, and extended quarantining and isolation of citizens, individuals reported a deterioration of their mental health status (Wang et al., 2021). The lasting psychological effect of the quarantine and isolation measures increased the presence of mental health disorders, while individuals who were able to continue normal work schedules and personal interactions experienced less mental health issues (Wang et al., 2021). Additionally, prolonged confinement and isolation has a positive relationship to psychological damage that remained with individuals for extended periods upon the end of quarantining periods (de Lima et al., 2020). A study

completed by Zhao et al. (2020) further explored the effect of self-isolating and the detriment towards the human psyche. Their findings show an increase in symptoms of anxiety (by 14.4%), depression (by 29.7%) and posttraumatic stress disorder (by 5.6%) from year to year (Zhao et al., 2020).

Research on the mental health effects of the COVID-19 pandemic highlighted the increased risk for suicidal tendencies (Moutier, 2021). Suicide is a leading cause of death in the world due to extreme emotional distress and is preventable if the correct action is taken to address the mental health symptoms leading to the potential risk factors within individuals (Moutier, 2021). As the pandemic began, surveys of U.S. adults showed 21% of individuals who were engaged in quarantining measures reported higher levels of stress and anxiety that was compared to 13% not engaged in quarantining measures (Panchal et al., 2020). The percentages of individuals who reported detrimental effects to their mental health continued to rise from 39% in May 2020, to 53% in July 2020 (Moutier, 2021). The pandemic's psychological effect on individuals raised concern of increased rates of suicide due to fear, depression, anxiety, and self-isolation (Gunnell et al., 2020; Sher, 2020).

As the world continues to experience a rapid increase in positive COVID-19 diagnoses, as well as negative mental health effects due to the pandemic, medical and mental health workers have experienced a major increase in workload while managing the well-being of communities (de Lima et al., 2020; Sharma et al., 2020). COVID-19 created a large influx of needed mental health treatment for a high volume of people and caused a strain on hospitals and medical workers due to lack of staffing and insufficient resources (Demirhan, 2020). Hospital organizations and medical offices were forced to rethink how they operate to provide effective treatment to as many individuals as possible, which placed a hardship on the medical workers in

the process (Demirhan, 2020). Additionally, the rise in need for mental health treatment during the pandemic placed a strain on mental health organizations and social services (Rapisarda et al., 2020). As the demand for mental health treatment increased, so did the need for additional workers, larger caseloads, increased work hours and insufficient resources contributed to negative mental health effects of the workers (Rapisarda et al., 2020).

### ***Effects of COVID-19 on Medical Workers***

As COVID-19 spread over the globe and infection numbers increased, the high demand placed a strain on hospitals and medical offices to ensure the care of all patients through testing and treatment of the disease (Sheraton et al., 2020; Shoja et al., 2020). The increase in workload of healthcare workers was associated with increased burnout and psychological distress due to the increased hours, fatigue, lack of sleep quality, and the psychological effects that accompanied the physical risks (e.g. to self, family) of daily working around a deadly disease (Shoja et al., 2020).

As the rise of cases placed hardship on the hospitals and healthcare workers of the world, the increase of stress had detrimental effects on the medical workers tasked with treatment of COVID-19 patients (Ng et al., 2020). Frontline healthcare workers reported higher levels of anxiety and depression due to the pandemic's occupational effects and many organizations began providing ongoing mental health support as an intervention for employees (Ng et al., 2020). A study completed by Vindrola-Padros et al. (2020) explored the perceptions and experiences of UK healthcare workers, in terms of care delivery, healthcare organizational policies and support, and mass media reporting of healthcare worker experiences during the COVID-19 pandemic. The study used a series of surveys and in-depth telephone interviews, and the findings from their study show healthcare workers felt there was a lack of preparation for a pandemic (Vindrola-

Padros et al., 2020). Healthcare workers expressed lack of preparedness in instances such as insufficient personal protective equipment resources and a lack of routine testing for COVID-19 which contributed to an increase of stress and anxiety in the workplace (Vindrola-Padros et al., 2020). Additionally, the study highlighted the impression that healthcare workers felt undertrained, less supported and a large misconception of the effects of the pandemic on healthcare workers by media reporting outlets (Vindrola-Padros et al., 2020).

Healthcare professionals are exposed to high levels of occupational stress and many healthcare workers have reported higher levels of occupational stress during the COVID-19 pandemic when caring for COVID-19 patients (Wang et al., 2020). Higher job task demands on healthcare workers during the pandemic have been a detriment to their occupational well-being due to increased stress, consistent change, lack of autonomy and lack of organizational support (Scanlan & Still, 2019).

A study completed by Benfante et al. (2020) further explored how the COVID-19 pandemic contributed to stress, and specifically traumatic stress, experienced by healthcare workers in the medical setting. The researchers completed an in-depth review of previous research to better understand stress and trauma related symptoms and found stress, and trauma related stress, was present in up to 34% of frontline medical workers (e.g. nurses, LPN, practitioners) due to the pandemic (Benfante et al., 2020). The researchers expressed a need for continued research on the long-term mental health effects of the COVID-19 pandemic on healthcare workers, with a focus on posttraumatic stress disorder (Benfante et al., 2020). As organizations and employees learn about the negative mental health effects experienced by healthcare workers, it is crucial to gain further knowledge on how to provide adequate support.

Muller et al. (2020) completed a rapid systematic review to further explore the existing research on the mental health impact of the COVID-19 pandemic on healthcare workers and the ability of the healthcare system to support them during the pandemic. The negative mental health impact on healthcare workers caused by the COVID-19 pandemic show that one of every five healthcare workers experience increased anxiety and/or depression, two in five report insomnia, and report higher levels of anxiety, depression, and sleep problems compared to non-healthcare workers (Muller et al., 2020). Recent surveys have also reported frontline healthcare workers have increased psychological distress, higher risks of trauma and suicide, while healthcare organizations have demonstrated an inability to support the mental health needs of healthcare workers through viable interventions (Kinman et al., 2020; Muller et al., 2020).

Research continues to provide information on the need for mental health support for healthcare workers during times of increased distress due to the COVID-19 pandemic. A study completed by Tomlin et al. (2020) explored the current guidance on maintaining and intervening mental health symptoms of healthcare workers during the COVID-19 pandemic. Within the study, the researchers built off work already completed by the Intensive Care Society for providing support to healthcare workers (Tomlin et al., 2020). The researchers expanded the guidance provided by incorporating mental health intervention recommendations, tips for organizations and for individual healthcare workers, within a phased flow chart addressing the management of short-term and long-term symptoms (Tomlin et al., 2020).

An additional study completed by Chung and Yeung (2020) focused on the mental health of healthcare staff in China, who worked directly with COVID-19 patients, using a mental health self-assessment. To help combat the mental health strain on medical workers caused by the pandemic, their study created a guideline for addressing the psychological crisis in healthcare

workers through a five-step process (Chung & Yeung, 2020). The process addresses the emergency psychological crisis by recommending the following: a) frontline staff treating COVID-19 patients receive prior psychological crisis intervention training; b) staff working in isolation ward should be put on rotations c) accommodation should be provided to frontline staff for self-isolation; d) hotline and online psychological crisis interventions are to be made available to workers; e) and a psychological response team consisting of psychiatrists, psychologists, and psychiatric nurses should be formed in each unit to provide staff with psychological support (Chung & Yeung, 2020).

An additional study completed by Lai et al. (2020) focused on better understanding the factors associated with mental health outcomes in healthcare workers directly related to the increased workload during the COVID-19 pandemic. Using a cross-sectional study method, the researchers surveyed 1,257 health care workers in 34 hospitals in China, who housed specific wards for COVID-19 patients and the results of their survey show healthcare workers expressed an increase in symptoms of depression, insomnia, high levels of occupational distress and increased anxiety levels (Lai et al., 2020). Furthermore, the study showed symptoms are reported more present in women nurses who work directly in the COVID-19 areas of their medical facility (Lai et al., 2020). The researchers discussed the findings of their study and based on the foundations of increased mental health symptoms in healthcare workers who are directly treating patients with COVID-19, they suggest medical facilities provide increased employee care, support services and interventions to assist in managing their potential risk for increased mental health symptoms (Lai et al., 2020).

Institutions across the world have worked to create guidelines, interventions, and support for healthcare workers during the COVID-19 pandemic. A study completed by Miotto et al.

(2020) explored the psychological impacts of the COVID-19 pandemic on healthcare workers and proposed a three-tiered model for an emotional support system and mental health service implementation for clinical and nonclinical healthcare workers.

The three-tiered system of support for healthcare workers was developed in the study to complete the following tasks: Tier 1 team focuses on providing broad-based practical, informational, and educational support for health workers; Tier 2 focuses on screening and providing emotional support to healthcare workers working in high-risk units or departments of their facility; Tier 3 focuses on providing direct mental health services to the individual healthcare workers who request services, as well as coordinating services for their immediate family members (Miotto et al., 2020). The researchers expressed a need for continued research on how to support an individual's mental health symptoms during the pandemic because early intervention can be the difference between mild symptoms and high level to severe symptoms (Galea et al., 2020).

### ***Effects of COVID-19 on Mental Health Workers***

The COVID-19 pandemic was widely understood within society as a major threat to the physical well-being of citizens which created feelings of stress and fear due to the uncertainty, unpredictability, change in normal day to day living and the seriousness of the disease itself (Rajkumar, 2020; Zandifar & Badrfam, 2020). An aspect of the pandemic which created a different challenge was the onset of negative mental health effects experienced by individuals (Rajkumar, 2020). The negative mental health effects were commonly due to the saturation of instilled fear, the management of the pandemic by governments and the increased hardships brought on by the COVID-19 disease (Rajkumar, 2020). Research found people reported increased negative mental health symptoms due to the uncertainty, fear of obtaining the disease,



the inconsistent misinformation about disease management by the media and increased isolation from others during the pandemic (Bao et al., 2020; Rajkumar, 2020; Zandifar & Badrfam, 2020).

Another aspect of mental health distress which arose due to the pandemic was the immediate economic impact and financial stress experienced by many individuals and families (Shigemura et al., 2020). Due to increased quarantining, business shutdowns, and layoffs, many were left without jobs or a source of income which many reported contributed to an increase in their levels of fear, panic, and negative mental health symptoms (Shigemura et al., 2020; Rajkumar, 2020). The COVID-19 pandemic created a wide range of negative mental health effects on people around the world that ranged from excessive fear, anxiety, depression, as well as an increased risk of suicidal tendencies (Galea et al., 2020; Moutier, 2021; Muller et al., 2020).

The increased onset of mental health issues plagued the citizens of countless countries around the world upon the arrival of the pandemic that caused a surge for need of mental health services to assist individuals with coping and managing their symptoms (Rapisarda et al., 2020). Scholars predicted the increase in need for mental health services would surpass the capacity of the current mental health systems in place (Marques et al., 2020). Throughout the pandemic, 50% of people in need of mental health services were reported to be unable to receive the needed services due to lack of resources (Marques et al., 2020).

Through continued research to better understand the negative mental health effects of the pandemic, researchers have identified specific demographics who are more vulnerable to increased negative mental health symptoms (Rajkumar, 2020; Zhu et al., 2020). Specific populations susceptible include the currently mentally ill, elderly adults, pregnant women, the homeless, migrant workers, and Chinese students who are studying abroad (Liem et al., 2020;

Tsai & Wilson, 2020; Yang et al., 2020; Zhai & Du, 2020). The influx in the need for mental health services, coupled with the reported lack of resources, has impeded the ability of mental health workers to fully provide effective and ethical services to clientele (D'Agostino et al., 2020; Rapisarda et al., 2020).

The COVID-19 pandemic has created a difficult dynamic for mental health workers, and mental health agencies, to operate and engage with patients to provide the needed care and management of negative mental health symptoms (Marques et al., 2020). A study completed by Grover et al. (2020) evaluated the impacts of the COVID-19 pandemic, and lockdown procedures, on the mental health services and workers, in the country of India. The researchers completed their study using an online survey which was sent to mental health workers throughout 109 mental health agencies, and training centers (Grover et al., 2020). Results show mental health workers who frequently have been in contact with COVID-19 positive clients (increasing personal stress) have increased occupational stress and place a strain on the ability to provide effective mental health resources (Grover et al., 2020). The study additionally suggests lockdowns caused a significant disruption of the needed mental health services for patients, aligning with similar data from other countries that lead to increased agitation, violence, and suicidal behavior due to substance withdrawal (Grover et al., 2020).

There have been major impacts on mental health care systems across the world and the United States has experienced a major impact on the access to mental health services for individuals (Marques et al., 2020). A study completed by Bojdani et al. (2020) focused on the impact of the COVID-19 pandemic on the psychiatric care of the citizens in the United States in different settings (e.g. outpatient services, emergency room, inpatient units, consultation services, and community mental health services) while also discussing protocol changes faced by

psychiatric workers. The researchers found the pandemic created major operating changes in effective service delivery such as increased wait times for appointments or medication, increased use of virtual services, less formal engagements (e.g. enrollment procedures, update questionnaires) with patients by doctors or mental health workers, increased caseloads resulting in lower appointment availability and an overall lack of resources to provide the mental health needs of consumers (Bojdani et al., 2020).

The researchers additionally presented the reported ethical concerns of psychiatric workers involving the inability to effectively treat and engage with consumers due to the increased nature of informal treatment sessions, lack of detailed information gathered during informal treatment session, and lack of infectious disease training (Bojdani et al., 2020). The researchers suggest a need for mental health agencies, hospitals, and government officials to continue researching and modifying operating procedures to ensure there is adequate resources to treat the rising consumer mental health needs while maintain ethical practice (Bojdani et al., 2020).

Rising negative mental health effects have contributed to a rapid increase in occupational distress for mental health workers and has created an evolution to the process of delivering mental health services (Taylor et al., 2020). First, one positive aspect learned from the pandemic is the effective use of digital technology on delivering mental health services to people (Taylor et al., 2020). Due to the increased social distancing, and fear of spreading the COVID-19 virus, many mental health workers and clinicians have turned to using technology for service delivery in having virtual therapy sessions, assessments, and medication management appointments for prescriptions (Taylor et al., 2020). While this method has been effective in helping clinicians and workers continue services, there have been barriers such as ensuring individuals have working

internet, capable devices, and the ability to provide guaranteed privacy for consumers (Moreno et al., 2020; Taylor et al., 2020).

Second, many agencies have utilized technology to track the mental health of their patients more effectively using digital systems due to the convenience of patients to contact their doctor, or clinician and report any major increase in symptoms (Moreno et al., 2020). An increase in online collaboration and a decrease in face-to-face interactions between employees can result in a stressful work environment for employees due to the desire for 24/7 access, potential for increased workloads, and can result in lower job performance, overall well-being and increased risk for burnout (Jain et al., 2019).

Third, mental health workers and clinicians have worked to create strategies and interventions to assist the community in managing their mental health during the trying times of the COVID-19 pandemic (Duan & Zhu, 2020). Therapeutic strategies have been researched and proposed ranging from the creating of specialized teams to address mental health symptoms directly related to the pandemic, community training sessions on basic mental health care, online surveys to assess the state of the mental health of local communities, online mental health education materials and increased low-cost/free online mental health counseling for the lower socioeconomic population (Duan & Zhu, 2020; Liu et al., 2020; Rajkumar, 2020; Xiao, 2020)

Mental health workers have been required to learn and alter their methods of practice during the COVID-19 pandemic to ensure they are able to continue delivering treatment and service to their clients (Thome et al., 2020). The pandemic has forced mental health agencies, and workers, to be flexible, adapt to the uncertainty and changing rules, and learn alternative ways of engaging teamwork and communication to ensure service delivery (Moreno et al., 2020). The pandemic engaged another new dynamic for mental health workers to address during service

delivery, personal protection from infectious diseases which is more commonly experienced by medical healthcare workers (Thome et al., 2020). Mental health agencies have adopted purchasing and providing many different pieces of personal protective equipment (PPE) for their workers providing services in various settings (e.g. office, in-home, school-based) (Thome et al., 2020).

## **Job Satisfaction**

### ***Defining Job Satisfaction***

Job satisfaction of an employee is described by the levels of satisfaction and happiness an employee receives from their job (Hidayah & Tobing, 2018). Job satisfaction is tied to an employee's ability to complete job tasks, learn and gain knowledge while on the job and forming and engaging in positive workplace relationships (Batista & Reio, 2019; Eliyana et al., 2019). Additionally, job satisfaction is crucial to an employee's job performance, commitment to their organization, ability to create and form healthy workplace relationships, and maintain overall occupational well-being (Batista & Reio, 2019; Eliyana et al., 2019). Job satisfaction is often seen as an employee having a high level of happiness and a positive feeling from the job characteristics, the quality of work completed by the employee and the evaluation provided from the employer (Hidayah & Tobing, 2018). When employees report a high level of job satisfaction, they are more likely to speak highly of the organization, increase organizational commitment and improve employee performance (Badrianto & Ekhsan, 2020; Hidayah & Tobing, 2018).

Job satisfaction is affected by two main factors, intrinsic and extrinsic factors that can dictate the direction in which an employee develops their level of job satisfaction (Hidayah & Tobing, 2018). Intrinsic factors of job satisfaction are defined as job-related factors which contribute to an employee's level of job satisfaction, while extrinsic factors focus on

environmental factors (Wernimont, 1966). Common intrinsic factors that affect job satisfaction include areas such as the level of recognition received, level of achievement on the job, satisfaction of completing the job tasks, ability to advance in the field, level of work autonomy, levels of occupational stress and motivation (Day et al., 2017; Scanlan & Still, 2019; Wernimont, 1966;). Within the list of intrinsic factors of job satisfaction, stress is acknowledged through research to be the most detrimental occupational barrier to an employee's well-being and job satisfaction (Prasetya et al., 2021). Stress has negative effects on not only an employee's job satisfaction, but also their levels of organizational commitment, motivation, job performance and increase the risk for burnout and turnover intention (Hendri, 2019; Prasetya et al., 2021; Rasool, 2020).

### ***Intrinsic and Extrinsic Effects on Job Satisfaction***

Understanding the importance of how intrinsic and extrinsic factors effect job satisfaction has been researched using the groundwork laid out by the model of motivational versus hygiene factors from Herzberg, Mausner, and Snyderman (1959) (Huang & Van De Vliert, 2003). Both intrinsic and extrinsic factors are positively related to the level of job satisfaction experienced by an employee, but there is a third factor in determining which factor produces the larger affect, and that is the employee's value placed on the factors (Dunnette et al., 1967; Huang & Van De Vliert, 2003; Mottaz, 1985). Studies completed evaluating this third factor show employees tend to favor extrinsic factors over intrinsic factors, in terms of their relationship to job satisfaction (Huang & Van De Vliert, 2003).

With research showing a higher importance placed on extrinsic factors of job satisfaction by employees, it is imperative to define the different extrinsic factors experienced by employees. Common extrinsic factors that affect job satisfaction include areas such as organizational change,

levels of leadership/support, toxic leadership, compensation, positive psychological capital, human resource management, workplace relationships and working conditions (Day et al., 2017; Inceoglu et al., 2018; Kalshoven & Boon, 2012; Koropets et al., 2020).

**Organizational Change.** One major extrinsic factor tied with job satisfaction is organizational change. Organizational change is an unavoidable occurrence and consistent change has negative effects which contribute to increased levels of occupational stress and burnout within employees, leading to lower job satisfaction (Morrell et al., 2004). Frequent changes within organizations, planned or unplanned, contributes to increased occupational stress, lowers job satisfaction, and fosters psychological uncertainty and role ambiguity within employees, contributing to the increased potential for burnout to occur within employees (Choy & Kamoche, 2020; Day et al., 2017; Ma, 2021).

Change within an organization is often met with resistance from employees due to reported difficulty with managing the change or an unwillingness to adapt, cause significant occupational stress (Choy & Kamoche, 2020; Erwin & Garman, 2010; Hayajneh et al., 2021). An employee's acceptance of the change event can determine how the change will affect the well-being, motivation, and satisfaction of the employee (Day et al., 2017). In a literature review conducted by Arifin (2019) exploring how employee attitudes towards organizational change can affect an employee, potential negative attitudes towards the change, by the employee, enact resistance and cynicism, leading to higher levels of stress and lower reported job satisfaction (Arifin, 2019).

**Leadership.** A second extrinsic factor which can affect an employee's job satisfaction is the effectiveness of leadership and leadership support shown to an employee (Koropets et al., 2020; Louis & Murphy, 2017). Effective leadership within an organization, and the avoidance of

toxic leadership is essential to the success of not only the employees of the company, but the organization as a whole entity (Koropets et al., 2020; Louis & Murphy, 2017). Effective leader-employee relationships within the organizational hierarchy are important for successful supervision, motivating employees and ensuring the overall psychological well-being of the employees (Arnold, 2017).

Behaviors, choices, and actions of organizational leaders are significantly related to impacting the psychological well-being, job task performance, job satisfaction and motivation of employees (Inceoglu et al., 2018; Koropets et al., 2020; Louis & Murphy, 2017). Additionally, when employees experience high levels of social support from their supervisors, and their organization as a whole, they report higher levels of job satisfaction, motivation, overall well-being and lower levels of burnout and turnover intention (Ahmad et al., 2014; Choy & Kamoche, 2020; Inceoglu et al., 2018; Louis & Murphy, 2017).

One common tool utilized by employers to support their employees, with positive reception by employees, is executive coaching (Gan et al., 2020). Executive coaching is viewed by organizational leaders and researchers as an essential tool for training, employee and organizational leadership development, and overcoming performance barriers (Gan et al., 2020). Executive coaching is defined as the process of improving work performance using individual coaching sessions to provide feedback on decision making, utilize encouragement and raising awareness about specific decision-making processes in an organizational setting (Pousa, 2014; Rekalde et al., 2017;).

Research on the effectiveness of executive coaching has provided evidence as an effective, employee-need centered, method for leadership development, employment development and an efficient way to increase employee support (Arakawa & Yakura, 2020;



deHaan et al., 2019). Additionally, research suggests executive coaching teaches the importance of relationships, builds relationships with employees through honesty, trust and communication, and encourages professional attributes which fosters improved motivation and job satisfaction (deHaan et al., 2011; de Haan et al., 2019; Mosteo et al., 2021).

A study completed by Koon and Pun (2017) investigated the role of leadership on an employee's job satisfaction and well-being. Their study found the presence of efficient and supportive leadership and organizational support improved an employee's overall well-being, specifically improved job satisfaction, performance, motivation and reduced symptoms of employee burnout (Koon and Pun, 2017). Understanding how leadership and organizational support affects employee job satisfaction and performance is crucial for fostering a work environment which promotes healthy employee growth, maintaining high levels of job satisfaction and reducing burnout and turnover (Wee et al., 2020).

**Human Resource Management.** A third extrinsic factor strongly tied to the job satisfaction of employees is an organization's proactive use of human resource management (Azeez, 2017). Human resource management within an organization is an essential department which can have a major impact on the success of the organization and employees (Yuryna-Connolly et al., 2017). Research within the facet of HRM has grown over the years and continues to stress the importance HRM plays on the overall well-being of employees (Yuryna-Connolly et al., 2017). HRM plays an important role in creating and maintaining a healthy organizational culture, which promotes employee engages and fosters teamwork, building of workplace relationships, improving employee job satisfaction and employee well-being (Batista & Reio, 2019; Yuryna-Connolly et al., 2017).

In a study completed by Prayogo et al. (2020) the researchers used qualitative research methods to investigate how HRM and job analysis can be used to create a positive organizational culture and improve job satisfaction, specifically within the food and beverage industry. The researchers explained job analysis consists of developing job requirements, defining incentives systems, developing training programs while assessing an individual's performance to determine their ability to contribute to the organization using their specific skill set (Prayogo et al., 2020). Through their study, they explained job analysis is crucial to the success of employees because it provides human resource management a detailed strategy for how to best utilize employees based on their skills (Prayogo et al., 2020).

Using sets of in-depth employee interviews at all levels of management and ordinary employees, the researchers worked to gain an understanding of how using job analysis through HRM could improve organizational culture and job satisfaction (Prayogo et al., 2020). Results of their study showed HRM is frequently involved with employees directly and when utilized, HRM tools such as job analysis can ensure employees are in the best positions to succeed (Prayogo et al., 2020). Additionally, the company's positive organizational culture is a key factor for shaping job satisfaction as employees reported acceptable support from managers, positive teamwork, and a friendly working environment (Prayogo et al., 2020).

Employee retention is an important goal and responsibility of HRM that plays a crucial role in the job satisfaction of employees and directly relates to employee retention (Yuryna-Connolly et al., 2017). In a study completed by Azeez (2017), he completed a review looking at employee retention, specifically through HRM practices. Through his review of qualitative studies, Azeez (2017) discussed three objectives to accomplish which were investigate previous works done to understand HRM practices and employee retention, to highlight different factors

which effect retention initiatives in an organization and to better understand and define the relationship between HRM practices with job satisfaction leading to employee retention.

Azeez's (2017) review identified/supported? seven key HRM practices that lead to increased job satisfaction and improved employee retention, according to the accounts of employees: a) leadership, b) rewards, c) salary, d) compensation, e) training and development, f) career development, and g) employee recognition . The researcher concluded based on those findings, and interviews reviewed from previous studies, when HRM includes those seven practices, or as many as possible, employees report higher levels of job satisfaction which result in higher rates of employee retention (Azeez, 2017).

The current state of qualitative research within the area of HRM has shown the perceived importance HRM plays in lessening the occurrence of employee burnout (Batista & Reio, 2019). The use of HRM practices by an organization can create a positive organizational culture that can increase an employee's commitment and job satisfaction within the organization, leading to higher levels of retention (Azeez, 2017). Additionally, the appropriate engagement of HRM practices is reported by employees to make them feel more support, better equipped to complete their job tasks, improves motivation, and increases the forming of workplace relationships, all of which increases job satisfaction of employees and decreases reported burnout (Batista & Reio, 2019; Yuryna-Connolly et al., 2017).

**Workplace Relationships.** The final extrinsic factor which plays a role in job satisfaction is the presence of healthy workplace relationships by the employees with fellow co-workers, supervisors and various members of the organization (Simon et al, 2010). Healthy workplace relationships are defined by the interactions between employees with the expectation of accomplishing a goal or expectation within their organization such as teamwork,

communication, team building, trust, support and encouragement (Batista & Reio, 2019; Tran et al., 2018). Relationships formed by employees in the organizational setting is a vital element in developing the organizational environment with regards to developing and maintaining employee well-being, investment within the company, cultivating an employee's job satisfaction and a potential factor to help decrease burnout within employees (Chiaburu & Harrison, 2008). When employees form positive relationships in the workplace, they are more likely to engage in teamwork, help others and contribute to a positive working environment, in turn, improving job satisfaction and reducing burnout and turnover (Batista & Reio, 2019; Kalshoven & Boon, 2012).

Employees who fail to create positive working relationships within their profession report increased feelings of negative attitudes, increased occupational stress, lower job satisfaction and motivation, and higher reported employee burnout, leading to increased amounts of employee turnover (Rasool, 2020). The importance of employees building healthy workplace relationships is linked to higher occupational motivation, organizational commitment, higher job satisfaction, and lower levels of turnover caused from burnout (Hendri, 2019). Research on healthy work environments encourages organizations to increase human resource involvement to help build a healthy workplace environment through organizationally planned team building activities to increase job satisfaction and overall employee well-being (Simon et al., 2010).

The foundation of job satisfaction's relationship to intrinsic and extrinsic motivation is important, because those factors play a critical role in employee success within the profession of healthcare (Simon et al., 2010). Healthcare workers have one of the most unique professions due to the direct impact they have on the lives of individuals. Within healthcare, job satisfaction is

crucial due to the important nature of work being completed by medical and mental health professionals.

### ***Job Satisfaction in Healthcare***

Healthcare workers provide the physical and mental care to the citizens of differing nations around the world, and understanding how job satisfaction plays a role on the performance of healthcare workers is vital. Poor job satisfaction of healthcare workers can have adverse effects on quality of patient care, lead to increased turnover, play a factor in employee well-being, effect risk of medical errors and effect risk of adverse medical events with patients/clients (Aloisio et al., 2018). A study completed by Abdullah and Nusari (2019) research the importance of job satisfaction in nurses within the public health care sector of Aden and Abyan, Yemen, to determine how job satisfaction plays a role in their job performance. Using a self-administered questionnaire among 220 nurses through 13 different public hospitals, the researchers conclude job satisfaction has a direct relationship with job performance showing nurses with lower satisfaction, have lower performance of their regular job duties (Abdullah & Nusari, 2019).

The job satisfaction of mental health workers is also important to consider because they are tasked with treating individuals dealing with mental health symptoms ranging from Attention Deficit-Hyperactive Disorder (ADHD) to schizophrenia (Mahoney et al., 2020). Mental health has long been a profession plagued by high turnover rates and high hire needs due to the stressful nature of the job, high work pressure, excessive workloads, and emotional exhaustion (Mahoney et al., 2020). A study completed by Ogresta et al. (2008) identified predictors of burnout syndrome in mental health workers, with job satisfaction and occupational stress being key elements of the study. The researchers used three dimensions of burnout, emotional exhaustion,

personal accomplishment and depersonalization, and the results of the multiple regression analysis show job satisfaction and occupational stress are key predictors of burnout syndrome that lead to poor job performance and high turnover (Ogresta et al., 2008).

Another study completed by Justin Scanlan and Megan Still (2019) used the job demands-resources model to explore the relationships between burnout syndrome, turnover, and job satisfaction specifically to job demands and resources for Australian mental health workers. Of the 277 mental health workers who participated in the study, the results indicate that burnout syndrome, turnover, and job satisfaction all have a strong interaction with one another (Scanlan & Still, 2019). Specifically, the emotional demands of the job, high caseloads, long hours, and work-home interference have a strong association with job satisfaction and burnout (Scanlan & Still, 2019).

### ***Effects of COVID-19 on Job Satisfaction in Healthcare Workers***

The COVID-19 pandemic has played a major role in almost every facet of life for everyone, and within the context of healthcare employees during the pandemic, it has played a factor in the development of their job satisfaction (Nemteanu et al., 2021). Among the general population, COVID-19 brought much insecurity and instability to the jobs of millions of people had a direct negative effect on their job satisfaction, job performance, and personal mental health (Nemteanu et al., 2021). The pandemic increased the stress, workload, and demands of healthcare workers increased expectations of higher job performance to treat and care for the physical and mental well-being of people (Rajkumar, 2020; Sheraton et al., 2020; Shoja et al., 2020).

Occupational stress is a significant variable in affecting the job satisfaction of healthcare workers, prior to the COVID-19 pandemic, and is a leading cause in fostering decreased job

performance (Deng et al., 2019; Diamantidis & Chatzoglou, 2019). During the pandemic, job satisfaction of frontline medical staff was directly linked to the successful implementation of medical care and prevention strategies for controlling the crisis (Yu et al., 2020).

A study completed by Said and El-Shafei (2021) worked to assess how the high demand experienced by nurses led to increased occupational stress, affected their job satisfaction, and their intent to potentially leave the job. Using a comparative cross-sectional study of 210 nurses who participated in the online survey, the researchers assessed specific COVID-19 related stressors (e.g. workload, dealing with death, personal demands/fears, increased security measures and stigma) (Said & El-Shafei, 2020). Results show a significant relationship between COVID-19 related stressors and increased occupational stress and decreased job satisfaction but had no relation to their intent to quit (Said & El-Shafei, 2020).

Additionally, a study completed by Alrawashdeh et al. (2021) explored how the exposure to significant physical and mental distress due to the COVID-19 pandemic directly affected levels of job satisfaction and burnout among healthcare workers, while also exploring their occupational perceptions and opinions during the pandemic. Using the theoretical foundations of Herzberg's motivation-hygiene theory and the job demands-resources model, they engaged 973 survey participants in the study using an online questionnaire, as well as 11 personal interviews, to assess the variables (Alrawashdeh et al., 2021). The results of their findings show the pandemic has a direct negative effect towards the burnout of the workers, especially in areas such as gender, high workloads, long hours, low resources and constant testing/testing positive for COVID-19. Additionally, the results show a direct negative effect on job satisfaction, especially on older healthcare workers and practitioners and healthcare workers experiencing higher levels of burnout (Alrawashdeh et al., 2021).

Research on the effects of the COVID-19 pandemic on the job satisfaction of healthcare employees has shown the pandemic has had a negative effect on job satisfaction. Additionally, the current research has shown a strong relationship between job satisfaction and burnout in healthcare and in relation to the COVID-19 pandemic. Additional research is needed as the COVID-19 pandemic is still a new aspect effecting many different areas of the occupational setting, especially in healthcare and mental health. Minimal research has been conducted assessing how the pandemic has affected mental health workers in terms of job satisfaction. With the current knowledge of how closely related job satisfaction and burnout are related in the healthcare field, it is imperative to understand how the COVID-19 pandemic has altered the risk for burnout in healthcare workers.

## **Employee Burnout**

### ***Defining Employee Burnout***

Employee burnout syndrome is commonly defined as an employee feeling emotionally drained, increased negativity towards the organization and co-workers, and becoming heavily detached from their work, cynicism on the job, feelings of reduced accomplishment/professional identity, resulting in a decline in job satisfaction, job performance and motivation (Bang & Reio Jr, 2017; Gabriel & Aguinis, 2021; Maslach, 1976; Prasetya et al., 2021). Burnout syndrome experienced by employees is commonly associated with areas such as organizational change, job satisfaction, motivation, human resource management, occupational stress, work-life balance, supervisor relations and overall employee well-being (Alrawashdeh et al., 2021; Arifin, 2019; Carolan & O de Visser, 2018; Vasquez, 2014).

The concept of burnout syndrome was explored by Christina Maslach (1976) who developed the Maslach Burnout Inventory to measure and diagnose the syndrome known as



“burnout” in employees (Janeway, 2020; Maslach, 1976; Maslach & Jackson, 1981). Among scholars, employee burnout is defined as an occupational psychological symptom which occurs in response to different stressors experienced in an organization, workplace setting, and is a multi-facet phenomenon which includes three main effects: a) emotional exhaustion, b) depersonalization, and c) reduced personal accomplishment (Nesher Shoshan & Sonnentag, 2019).

The job demands-resources (JD-R) model is a theoretical model used in research to address occupational health and employee well-being (Demerouti et al., 2001; Lesener et al., 2018). The JD-R model is a common theory used for understanding and exploring occupational burnout syndrome in employees (Demerouti et al., 2003). The JD-R model states burnout arises when a person, or employee, experience increasing job demands and feel they have inadequate resources to cope and manage those high demands (Demerouti et al., 2001; Maslach & Leiter, 2016). The central foundation of the JD-R focuses on the working conditions of any occupation being considered universal job demands and job resources (Lesener et al., 2018) This foundational core of the model allows applicability to general working conditions to detect the consequences specific to occupational environmental stressors (Demerouti et al., 2001; Lesener et al., 2018).

Employee burnout can become a toxin inside an employee and spread throughout the organization, and effect employees in numerous negative ways such as their levels of engagement, cynicism towards the organization, counterproductive and negative employee behaviors, motivation, satisfaction, and increase organizational retention (Bang & Reio Jr, 2017; Gauche et al., 2017; Miyasaki et al., 2018; Turek, 2020). In a study completed by Hidayat and Agustina (2020), they explored the effect of burnout syndrome and employee engagement on

turnover retention to better understand the relationship between burnout on employee engagement and if employee engagement then impacted turnover intention. The results of the study show burnout syndrome has a significant effect on turnover intention, while employee engagement has a significant effect on turnover intention (Hidayat & Agustina, 2020).

There are questions on whether employee motivation has a direct relationship to affecting the experience of burnout syndrome, or if burnout syndrome effects employee motivation. Substantial amounts of research have been conducted to better understand the factors which contribute to burnout, and the lingering effects of burnout. One study completed by Papathanasiou et al. (2014) investigated how motivation, leadership, empowerment, and confidence relates to burnout in healthcare. The researchers defined motivation as the force applied to an employee to achieve a goal, and they alluded to previous research identifying areas such as autonomy, working conditions, effective supervision, and employee/supervisor relationship as key motivating factors for nurses in their study (Papathanasiou et al., 2014). Results indicate, based on reports by nurses, there is a higher correlation between motivation levels and burnout (Papathanasiou et al., 2014). Furthermore, when an employee experiences positive internal psychological states on the job, they are less likely to experience burnout on the job (Papathanasiou et al., 2014).

Additionally, looking at job motivation's link to burnout syndrome, a study completed by Trepanier et al. (2020) researched the moderating role of work motivation in relation to job resources (control and recognition) and burnout syndrome. The results show when employees are subjected to poor-quality work motivation (e.g. higher organizational control, micro-management, less autonomy, lower recognition) they are more likely to experiencing burnout syndrome (Trépanier et al., 2020). Employee burnout is often linked to an organization's

involvement with the employees in terms of employee development, leadership, and diversity (Ogresta et al., 2008). Studies investigating the correlation of job stress and employee burnout frequently report a significantly positive relationship, while burnout also contributes to job satisfaction and performance (Ogresta et al., 2008; Prasetya et al., 2021; Scanlan & Still, 2019).

Organizations play a pivotal role in supporting their employees, and their initiative begins with successful use of HRM practices (Batista & Reio, 2019; Yuryna-Connolly et al., 2017). In a qualitative study looking at the role HRM plays with retention of employees, Ellett et al. (2007) investigated personal and organizational factors which play a role in employee retention and turnover, and how HRM practices can help support those employees. An important foundation was discovered which expressed importance of HRM practices within the hiring process. The researchers explained how instances of burnout and high turnover can be addressed early by positive HRM practices during the hiring and socialization process which can result in employees feeling immediately invested and support within the organization (Ellett et al., 2007).

The researchers utilized in-person interviews to investigate organizational and personal factors which contributed to turnover and found factors leading to employee turnover where commonly reported as large workloads, poor organizational culture, low pay, feeling of no value to agency, inadequate resources, court system, lack of communication, large amounts of paperwork, minimal training and poor leadership as factors contributing to turnover (Ellett et al., 2007). Factors which contributed to employees choosing to stay with their organization included increased training, HRM involvement, positive organizational culture, work relationships, and positive interactions with management (Ellett et al., 2007).

Leadership is also a common area studied by scholars which is linked to having a direct effect on burnout experienced by employees (Arnold, 2019). Leadership plays a pivotal role in

the management of employee job satisfaction and employee burnout (Arnold, 2019). Effective leadership within an organization is crucial for ensuring the development and growth of employees, while support of employee well-being has a direct effect with job performance, job motivation, organizational commitment, and lower levels of burnout and turnover intention (Ahmad et al., 2014; Arnold, 2019; Inceoglu et al., 2018; Vîrgă et al., 2019).

Burnout syndrome has critical ramifications for not only the employee, but also the organization, and scholars have tied the manager's ability to support employees towards avoiding burnout as an ethical matter (Vullingsh et al., 2018). The supervisor's ability to provide ethical leadership through avoiding role ambiguity, ensuring appropriate workloads, providing social support in the workplace, and managing perceptions of fairness when engaging employees are all characteristics linked with supporting an employee's well-being to avoid burnout (Vullingsh et al., 2018)

Studies on leadership in healthcare have found the chosen leadership style by a supervisor is central to the success of an employee (Kelly & Hearld, 2020). The transformational leadership style has been the most studied leadership style associated with healthcare but results over multiple studies show inconsistent results on determining the effectiveness of transformational leadership on reducing burnout (Kelly & Hearld, 2020). Continued research is needed on leadership styles and the effectiveness of reducing burnout in employees to determine a generalizable leadership style (Kelly & Hearld, 2020). When a leadership style is chosen and engaged effectively, the leader can be a major factor for increasing job motivation (Kelly & Hearld, 2020).

In a study completed by Sijbom et al. (2018), the researchers studied how a leader's motivations and goals for their employee's effect burnout syndrome, while also studying how

that effect differs from the employee's personal goals contributing to burnout. The study used the theoretical framework from the leaders' mastery-approach goals (placing an emphasis on effort and learning), and the leaders' performance-approach goals (placing an emphasis on competency and employee ability) (Sijbom et al., 2018). The results found the mastery-approach method has a significantly positive effect on burnout, leading to less reported burnout, while the performance-approach method leads to higher amounts of reported burnout (Sijbom et al., 2018).

Recent studies on diversity in the area of burnout have investigated workplace spirituality as a new factor that has shown a link to helping employees manage and cope with burnout syndrome in the workplace (Karakas, 2009). Increasing the diversity of the workplace environment by the promotion and tolerance of workplace spirituality has been an innovative method in organizations attempting to help employees manage occupational stress, balance work-family stressors, and provides a sense of community in the workplace (Karakas, 2009). As organizations aim to place a higher value on personal employee factors which may contribute to burnout, while aiming to increase job satisfaction, many organizations have sought to increase diversity and organizational commitment through encouraging employee spirituality at work (Ravari et al., 2014).

A study completed by Dal Corso et al., (2020) investigated the role workplace spirituality plays in the relationship of supervisor behaviors and effect on employee burnout. The results show workplace spirituality strongly contributes to a reduction in burnout and improves relationships between employees and supervisors (Dal Corso et al., 2020). The inclusion of workplace spirituality can also be a helpful coping mechanism to manage and reduce burnout experienced by healthcare workers (Yang & Fry, 2018).

### ***Burnout Syndrome in Healthcare***

The demands and challenges of healthcare workers are always high and as a result, healthcare employees report experiencing higher than normal levels of occupational burnout (Willard-Grace et al., 2019). Approximately 76% of employees in the healthcare profession have reported experiencing burnout due to exposure to high levels of reported occupational stress (Willard-Grace et al., 2019). Increased occupational stress leads to lower job satisfaction, decreased motivation, higher risk of burnout syndrome and increased risk for turnover (Gabriel & Aguinis, 2021; Mahoney et al., 2020; Miyasaki et al., 2018).

Employee burnout has long been studied in the healthcare field, and one study of over 600 American healthcare workers who reported symptoms of burnout was also linked to lower worker production, increased absenteeism, increased health care costs, and increased turnover (Felton, 1998). Additionally, employee burnout affects almost 50% of all primary care workers and 47% of mental health workers report experiencing high distress and burnout (Simonetti et al., 2020). Scholars have researched burnout syndrome in healthcare workers and conclude healthcare workers are subject to higher risk of experiencing burnout (De Hert, 2020; Portoghese et al., 2014; Willard-Grace et al., 2019). Higher burnout in healthcare workers is commonly due to reported higher workloads, long hours, frequent organizational change, low social support, and high-pressure job functions (De Hert, 2020; Portoghese et al., 2014; Willard-Grace et al., 2019). Burnout syndrome is frequent in all levels of healthcare, from primary medical, to surgical, to mental health, and the effects of burnout can be life changing for many healthcare workers (De Hert, 2020; Simonetti et al., 2020).

A study completed by Agarwal et al. (2020) investigated factors contributing to burnout in medical healthcare professionals at the primary care level and the effect on perception of job fulfillment. Using qualitative methods, the researchers completed four focus group discussions

and two in-person interview sessions with primary care employees (Agarwal et al., 2020).

Common areas reported to cause burnout are heavy workloads, less work with patients and more paperwork, unreasonable expectations, feelings of being demoralized, undervalued, and consistent conflict during daily work functions (Agarwal et al., 2020).

In addition to primary care workers managing burnout, perioperative clinicians (ex. Anesthesiologists) are at high risk of burnout, and reported negative consequences of burnout to perioperative clinicians include personal consequences (e.g. increased substance abuse, poor work-family balance and increase mental health symptoms) as well as professional consequences (e.g. lower job performance, decrease patient satisfaction, lower quality of care and medical errors) (Al Kurdi et al., 2020; De Hert, 2020; Miyasaki et al., 2018; Vîrgă et al., 2019). Within the hospital setting, nurses frequently experience high pressure workloads and must manage many different roles within the job as nurses commonly report as factors leading to high levels of stress and burnout (Agarwal et al., 2020; McVicar, 2003). Additional factors of stress within the job functions of a nurse include changing workloads, high workloads, leadership styles of supervisors, conflict with co-workers or patients, and the emotional cost of caring for patients (Agarwal et al., 2020; McVicar, 2003; Papathanasiou et al., 2014).

Along with medical healthcare workers, mental health has long been a profession affected by burnout syndrome and high turnover rates due to high work pressure, excessive workloads, and emotional exhaustion (Mahoney et al., 2020). Mental health professionals tasked with caring for the long-term needs of clients with a mental health illness is a distressing situation, and long-term care is common for causing burnout in mental health employees (Lasalvia et al., 2009). The stressful work dynamic in the mental health field has resulted in 67% of providers and employees in the mental health field reporting burnout (Dreison et al., 2018).

Additionally, mental health employees and organizations report frequent professional financial strain, low staffing, and increased workloads for mental health workers (Dreison et al., 2018). Mental health workers who report burnout in the profession attribute those experiences to high levels of occupational stress, extensive workloads, low resources, long hours, and the emotionally taxing task of working with mentally ill patients and families (Dreison et al., 2018; Rössler, 2012).

### ***Burnout Effects from COVID-19***

Employee burnout syndrome is experienced regularly in normal working conditions by healthcare employees, but when the COVID-19 pandemic began, the risk for burnout in healthcare professionals increased significantly (Cullen et al., 2020; Zhao et al., 2020). The COVID-19 pandemic created high levels of psychological distress among citizens and increased the need for medical and mental health resources for citizens (Cullen et al., 2020; Zhao et al., 2020). Due to an increase in need for medical and mental health services, many healthcare organizations reported insufficient resources has increased stress on healthcare workers and increased risk of burnout (Cullen et al., 2020; Pfefferbaum & North, 2020).

With the reported increase of positive COVID-19 diagnoses, as well as negative mental health effects due to the pandemic, medical and mental health workers experienced increased workloads and increased stressors on the job (de Lima et al., 2020; Sharma et al., 2020). Frontline healthcare workers experienced various physical and psychological problems due to the increase in stress due to the pandemic lead to increased burnout in healthcare workers (Khosravi et al., 2021). Burnout has been identified by many scholars as a growing concern due to the COVID-19 pandemic's effects on healthcare workers (Chemali et al., 2019). Understanding red flags of burnout in healthcare workers during the COVID-19 pandemic is



pivotal to assisting healthcare workers in managing the stressors and symptoms (Felton, 1998; Khosravi et al., 2021).

A study completed by Cotel et al. (2021) investigated the predictors of employee burnout in healthcare workers during the COVID-19 pandemic in Romanian hospitals. The researchers engaged 523 healthcare workers to complete a series of questionnaires measuring burnout, job demands, job resources and personal resources (Cotel et al., 2021). Results of their study show 14.5% experienced emotional exhaustion, and three different job demands (e.g. work–family conflict, not feeling prepared, and emotional demands), three job resources (level of training, professional development on the job, and supervision) and one personal resource (self-efficacy) showed significant prediction of burnout (Cotel et al., 2021).

An additional study completed by Dinibutun (2020) researched burnout in physicians during the COVID-19 pandemic while further investigating major factors leading to burnout caused by the pandemic. The results of the study show physicians who have not actively chosen their profession or employer are at higher risk of burnout, while also finding physicians who are not actively fighting against the pandemic report higher levels of burnout and lower levels of job meaningfulness (Dinibutun, 2020). Both sets of researchers encourage healthcare organizations to provide interventions and supports for healthcare workers during the pandemic to help combat burnout (Cotel et al., 2021; Dinibutun, 2020).

### **Biblical Foundations of the Study**

COVID-19 has affected many areas of the lives of citizens in the nation, and the nations of this world. From a Christian foundation, it is important to look at these events through the words and expectations of God. Starting from the most important biblical foundation surrounding any situation, is understanding God looks to teach through all happenings and

circumstances in life. The Bible tells us in Romans 5:3-5, “More than that, we rejoice in our sufferings, knowing that suffering produces endurance, and endurance produces character, and character produces hope, and hope does not put us to shame, because God’s love has been poured into our hearts through the Holy Spirit who has been given to us.” (*English Standard Version Bible*, 2001). Through this ideal, God has a plan for all shows his omniscience and he creates all circumstance for a reason but trusting in Him is the initial path to accepting one’s own path.

The Bible provides many examples of how God’s people have endured hardships through events such as a pandemic, and the first instance in the Old Testament is the story of the plagues brought upon the Egyptian people, and the Pharaoh, during the Hebrews’ slavery. Within Exodus, Moses is able to recognize God’s presence during extraordinary events, where the Pharaoh did not, and through Moses’ belief and recognition of God, God guides Moses through his faith.

The ten plagues were unleashed (Exodus 7:14-12:26) and caused extreme economic hardships, as well as personal and natural hardships leading to the devastation of a nation. God described the ten plagues not as punishment, but more so an invitation to know and understand God, as He explains in Exodus 9:15-16, “For by now I could have put out my hand and struck you and your people with pestilence, and you would have been cut off from the earth. But for this purpose I have raised you up, to show you my power, so my name may be proclaimed in all the earth” (*English Standard Version Bible*, 2001). From a biblical perspective, God allows us opportunities to know Him and learn from His word through difficult times, as he did in Exodus. Through God’s word, God directs us to handle a pandemic such as the one we have all

encountered and how to manage the potential negative effects in the workplace such as burnout, or damaged job satisfaction.

The first major necessity taught during the COVID-19 pandemic is the need for salvation through Christ as Lord and Savior because no one is guaranteed another day on earth. Disasters often serve as reminders peace can be found through God because He provides the knowledge, strength, and comfort through His presence. If someone's relationship with God is struggling, or no sought after, natural disasters such as a pandemic can provide an opportunity to rekindle, or seek, a relationship with God. Through forming of a relationship, the pandemic could serve as an opportunity to create oneself anew through accepting, or reaching out to, Christ and allowing Him to provide truths and comfort through scripture, prayer, and salvation. This is seen in the Bible in 2 Corinthians 5:17, "Therefore, if anyone is in Christ, he is a new creation. The old has passed away; behold, the new has come," and then in Philippians 4:6-7, "Do not be anxious about anything, but in everything by prayer and supplication with thanksgiving let your requests be made known to God. And the peace of God, which surpasses all understanding, will guard your hearts and your minds in Christ Jesus" (*English Standard Version Bible*, 2001).

Through Jesus Christ, our souls are saved and renewed with an opportunity to enter the kingdom of God. Part of someone's renewal is being able to manage difficult times in life, such as a pandemic, or difficulties within a job. During those times the Bible teaches us to trust the Lord, and trust He will be a light and guiding presence in life. To trust in the Lord first comes through the building of a relationships with Him through prayer and scripture. God encourages all Christians to build a relationship using his word, and 2 Timothy 3:17 encourages us in this area by stating, "All Scripture is breathed out by God and profitable for teaching, for reproof, for

correction, and for training in righteousness, that the man of God may be competent, equipped for every good work” (*English Standard Version Bible*, 2001).

During difficult times, when inevitable change occurs from a worldwide scale, or even a personal scale, understanding change from a biblical perspective allows us to understand how God instructs and guides us to handle change. God addresses change frequently in the Bible and provides perspective on managing change. The story of the birth of Jesus Christ is the most important story involving change and accepting change. Through the life of Christ, the introduction of Christianity created major change for all nations and was met with hostility. People had to adapt, and seen through many books of the Bible, individuals handled change positively and negatively. One of the most important lessons from the Bible about change to be taken is the idea of trust and openness to change. Jeremiah 29:11 states, “For I know the plans I have for you,” declares the Lord, “plans to prosper you and not to harm you, plans to give you hope and a future” (*English Standard Version Bible*, 2001). This verse encourages us as Christians to trust Him and His plan for us, and through His plan will be change and adversity, but trusting Him is the first step to handling change.

Through times of change, support is important, whether someone is supporting a loved one, or supporting a co-worker, and the Bible provides excellent insight on the importance and duty of support. Looking from an organizational stance, support from leaders within a biblical perspective provides insight into how God expects leaders to lead and how followers should follow. God commands leaders to lead their followers justly, by example, and to lead towards Christ, which is revealed in 1 Peter 5:2-3 by stating, “Shepherd the flock of God is among you, exercising oversight, not under compulsion, but willingly, as God would have you; not for shameful gain, but eagerly; not domineering over those in your charge, but being examples to the

flock” (*English Standard Version Bible*, 2001). This verse highlights how leaders should lead others in a manner to provide support, motivate and lift others through turmoil, as leaders of organizations are tasked with doing for their employees to avoid burnout and turnover.

Avoiding burnout and a decrease in job satisfaction during a trying time of life, such as the COVID-19 pandemic, can be difficult, and maintaining motivation to honor Christ is crucial to upholding personal foundational truths, morals, and integrity. As a Christian, and looking at motivation from a biblical worldview, the ultimate motivator for an employee would be Christ, and honoring Christ through the work done within the company and holding oneself to the standards and principles of God. Motivation to work hard and be motivated in what you do is outlined in the Bible in Colossians 3:23, “Whatever you do, work heartily, as for the Lord and not for men” (*English Standard Version Bible*, 2001).

If someone is feeling frustrated, or unmotivated, God offers comfort and wisdom in scripture to always lean on Him for strength. God encourages us in Isaiah 41:10 to lean on Him by telling us, “Fear not, for I am with you; be not dismayed, for I am your God; I will strengthen you, I will help you, I will uphold you with my righteous right hand” (*English Standard Version Bible*, 2001). Additionally, maintaining a thankful and grateful heart towards the Lord for the blessed opportunity to work and provide for oneself, or a family, is an important aspect of knowing God. The Bible encourages us to be grateful of all that is given by the Lord in James 1:17, “Every good gift and every perfect gift is from above, coming down from the Father of lights with whom there is no variation or shadow due to change” (*English Standard Version Bible*, 2001).

God created a grand narrative and within His grand narrative comes foundational truths man lives by, and it is important to consider how satisfaction and burnout in an organizational

setting parallel into God's plans (Wolters, 2005). The word of God, through scripture, provides Christian's an avenue to grow a relationship with God, and grow as an individual through God's word while developing a foundational biblical worldview. Everyone abides by a set of foundational truths, whether from a secular worldview, or a biblical worldview, and scripture provides those foundational truths for ideas and understanding for Christians (Sproul, 2000). The Bible guides individuals on how God's word is used to develop foundational truths for wisdom and law to be used through all situations, and He provides this insight in Hebrews 4:12, "For the word of God is living and active, sharper than any two-edged sword, piercing to the division of soul and of spirit, of joints and of marrow, and discerning the thoughts and intentions of the heart" (*English Standard Version Bible*, 2001).

Once those foundational truths are established, insight into the heart and soul of the individual is the next step in understanding and providing biblical solutions to burnout experienced by employees. The grand narrative speaks of how man was created in God's image, but through sin, man fell from the graces of God into eternal sin (Wolters, 2005). Romans 3:23 speaks to sin by stating, "For all have sinned and fall short of the glory of God" (*English Standard Version Bible*, 2001). Sin takes the idea of man being an image bearer of God, and puts man estranged from the Creator, living in a fallen world filled with sinful hearts and secular worldviews man was not made to endure (Sproul, 2000). Understanding this foundational truth places the image and activities of man into a sinful, harsh reality can only be solved by redemption through Christ (Sproul, 2000). 1 John 1:9 explains the acceptance and confessions of sin leads to redemption and forgiveness, by stating, "If we confess our sins, he is faithful and just to forgive us our sins and to cleanse us from all unrighteousness" (*English Standard Version Bible*, 2001).

## Summary

The COVID-19 pandemic presented itself as a major challenge to all citizens and governments of the world and brought the importance of healthcare systems to the forefront. The effects of the pandemic on communities were seen through the physical and psychological detriment of the people of this world. The growing infection rates increased the workload and necessity of the world's medical and mental health workers. Healthcare workers across the world have endured a high stress profession, often leading to burnout if not managed appropriately. Due to the COVID-19 pandemic, healthcare workers have reported experiencing increased workloads, a higher census of patients and insufficient resources in managing patients and clients during the pandemic that has led to higher levels of stress and increased risk of burnout and low job satisfaction.

From a biblical worldview, the COVID-19 pandemic has tested the faith of many, and through trying times, God uses those challenges to provide opportunities for people to understand and learn about Him. God provides His word, through scripture, to understand how to God's plan is meant to bring us closer to Him, while managing change, hard times, and learning to support one another in a Christ-like manner. Establishing the foundational truths of God's presence, his omniscience, and the importance of honoring Him through the acceptance of Christ as savior, leads to a path of understanding and acceptance of all situations in one's own path through the wisdom of God.

Medical and mental health care organizations have struggled to provide the necessary support for the healthcare workers during the COVID-19 pandemic. It is imperative to better understand how the pandemic has affected mental health workers in order to begin looking at

how to better support them to avoid burnout and maintain high levels of job satisfaction, while working to increasing retention within the profession. This study looks to further research how the COVID-19 pandemic's influence on mental health employees in Western North Carolina, of the United States, has affected, and contributed to, the job satisfaction levels, the risk for increasing the experience of occupational burnout and the effect on intent to leave the profession in mental health workers.



## CHAPTER 3: RESEARCH METHOD

### Overview

This quantitative study investigated the repercussions of the COVID-19 pandemic on job satisfaction, burnout syndrome, and intent to leave in mental health workers before and after the first 3 years of the COVID-19 pandemic in Western North Carolina. Additionally, this study examined whether the timeframe prior to the onset of the COVID-19 pandemic and three years post-pandemic had a moderating effect on the relationships between job satisfaction and intent to leave, as well as the relationship between burnout and intent to leave among mental health professionals. This chapter details the research questions and hypotheses investigated in this study as well as provides in depth information on the quantitative research design for the study. The participants of the study were mental health workers in the Western region of North Carolina.

Within this casual-comparative research study each participant was asked to complete an online survey to measure their perceived job satisfaction, burnout, and intent to leave before the COVID-19 pandemic, and their state of job satisfaction, burnout, and intent to leave after 3 years of the COVID-19 pandemic. Measurement tools utilized in this study were the revised 6-item version of Roodt's (2004) turnover intention scale (Appendix C), Job Satisfaction Survey (Spector, 1985) (Appendix E), and the Oldenburg Burnout Inventory (Demerouti et al., 2003) (Appendix G). This chapter provides an in-depth description of the research questions, hypotheses, research design, participants, study procedures, instruments and measurement tools, operationalization of variables, data analysis, delimitations, assumptions, limitations, and a summary of the chapter.

## **Research Questions and Hypotheses**

### **Research Questions**

RQ1: What is the difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic?

RQ2: What moderating effect did the COVID-19 pandemic have on the relationship between job satisfaction and burnout syndrome on intent to leave?

### **Hypotheses**

Null Hypothesis 1: There is no difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic.

Alternative Hypothesis 1: There is a difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic.

Null Hypothesis 2: The COVID-19 pandemic does not have a moderating effect on the relationship between job satisfaction and intent to leave.

Alternative Hypothesis 2: The COVID-19 pandemic does have a moderating effect on the relationship between job satisfaction and intent to leave.

Null Hypothesis 3: The COVID-19 pandemic does not have a moderating effect on the relationship between burnout syndrome and intent to leave.

Alternative Hypothesis 3: The COVID-19 pandemic does have a moderating effect on the relationship between burnout syndrome and intent to leave.

### **Research Design**

This casual-comparative research project utilized a quantitative research method to measure the how the COVID-19 pandemic affected the job satisfaction and burnout syndrome and contributed towards intent to quit in mental health workers in the Western region of North Carolina. Furthermore, this study examined whether the timeframe prior to the onset of the COVID-19 pandemic and three years post-pandemic had a moderating effect on the relationships between job satisfaction and intent to leave, as well as the relationship between burnout and intent to leave among mental health professionals. All quantitative data was collected through an online survey to statistically analyze the effects of the three independent variables, COVID-19 pandemic, job satisfaction, and burnout, on the dependent variable intent to leave.

Mental health workers experience high levels of stress on the job and being supported through access to necessary coping resources for stress can help employees maintain high levels of job performance and motivation to stay in the field (Cullen et al., 2020). Job satisfaction and burnout have been directly linked to job performance and turnover (Cullen et al., 2020; D'Agostino et al., 2020). Justification for this research design came from the need to further understand how the COVID-19 pandemic has affected mental health workers in terms of their job satisfaction, experiencing burnout, and their intent to leave the mental health field. Research has been completed in abundance to better understand how COVID-19 has changed the workforce, as well as specifically investigating that effect on medical healthcare workers. Minimal research has been conducted to understand how the pandemic has impacted mental health workers. Continued research is needed to understand how the COVID-19 pandemic has

directly affected the areas of job satisfaction, burnout, and intent to leave, in order to help organizations with further supporting mental health workers.

### **Participants**

This research study used non-probability convenience sampling methods to select participants who were mental health workers in the Western region of the state of North Carolina before the COVID-19 pandemic and 3 years after the beginning of the COVID-19 pandemic. Mental health workers were defined in this study as either licensed clinicians, practitioners, or direct care professionals (qualified professionals, associate professionals, or paraprofessionals). The requirements for being a participant in this study were that each participant is over the age of 18 years old, is an employee who worked in the mental health setting in Western North Carolina prior to the COVID-19 pandemic and 3 years after the COVID-19 pandemic began, and worked for the same agency during both periods of time to avoid any potential affects in perception due to changing employers.

The number of participants in this study was 103 total mental health workers in the Western region of North Carolina. For the first research question, a one-way repeated measures MANOVA was used to analyze the data collected due to its ability to measure differences in multiple dependent variables over time. For the second research question, a multiple linear regression was used to analyze the data to identify a potential moderating effect on the relationship between job satisfaction and intent to leave, as well as the relationship between burnout syndrome and intent to leave.

A priori power analysis is an effective method used in research to justify the chosen sample size is large enough to collect the valued data while preventing erroneous influence on the desired values (Lakens, 2022). The important goal of the a priori power analysis is to achieve

sufficient power for the assumption of the effect size (Lakens, 2022). A priori power analysis was used in this study to evaluate the alpha level and effect size to determine a minimum sample size for the use of a one-way repeated measures MANOVA. For a one-way repeated measures MANOVA, an a priori power analysis was conducted using G\*Power version 3.1.9.7 and assumed a medium effect size of .15 ( $f^2 = .15$ ) and  $\alpha = .05$  to achieve a power of .80 calculated a sample size of 90 participants for this study. For a multiple linear regression with three variables, an a priori power analysis was conducted using G\*Power version 3.1.9.7 and assumed a medium effect size of .15 ( $f^2 = .15$ ) and  $\alpha = .05$  to achieve a power of .80 that calculated a minimum sample size of 68 participants for this study. The number of participants who participated in this study was more than the suggested amount based on both priori power analysis calculations.

Once permission was obtained from participating agencies, contacts for recruitment were made through the human resource departments at various mental health agencies, or offices, explaining the study (Appendix A) to engage workers in an anonymous online survey. Once a mental health agency agreed to assist in this study, the survey link was sent to the human resource office of the participating agency, and the human resources department sent the link to each mental health employee. The link to the survey included the informed consent page, a demographic page (Appendix I), as well as the TIS-6, Jos Satisfaction Survey, and Oldenburg Burnout Inventory survey. Data was collected and stored on a secure password protected computer and will be kept for 3 years after the completion of this study, and then permanently deleted at the conclusion of those 3 years.

### **Study Procedures**

Within the study, the beginning of the recruitment process was to locate mental health agencies and practitioner offices, in Western North Carolina, who could be contacted to

participate in the study. Using the state Managed Care Organization (MCO) provider network lists from Partners Behavioral Health Management and Vaya Health, a list was compiled of potential participants. The top ten largest agencies were selected first and the human resources department of each agency was contacted detailing the nature of the study. If the participating agency agreed to participate, it was requested the HR department send out the online survey through email to mental health workers within the agency. Once I received approval of the study from Liberty University's IRB , the HR department sent the online survey through JotForm throughout the agency, with a description of the research study and explanation of the need for participants. The survey consisted of an informed consent page and questionnaires addressing the variables. Permission for the use of each survey was granted or informed free for use by the creator of the survey (Appendix D, F, and H). Each participant was asked to complete the survey twice to measure each variable before the COVID-19 pandemic and 3 years after the beginning of the COVID-19 pandemic. The data from the completed surveys was put into SPSS and prepared for statistical analysis.

## **Instrumentation and Measurement**

### **Job Satisfaction Survey**

The Job Satisfaction Survey (JSS) is a 36-item questionnaire developed by Spector (1985) to assess an employee's attitude about their job and different aspects of their job. The JSS is a nine-facet scale, and each facet is assessed using four items to compute a total score (Spector, 1994). The nine facets included in the JSS to assess job satisfaction are pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication (Spector, 1997). Each one of the nine-facet subscales within the JSS

utilizes four items provided within a statement that is rated between strongly disagree, and strongly agree, on a six-point Likert-type scale by the participant (Spector, 1997).

To measure the reliability of the JSS, internal consistency reliability had been assessed from a sample of 3,067 participants who completed the JSS, and the coefficient alphas of each subscale ranged from .60 (coworker subscale) to .91 for the total scale (Spector, 1997). The validity of this measurement tool was provided through evidence compared to different job satisfaction scales conducted on the same employees (Spector, 1997). One example used for the validity of the JSS is the correlation of five subscales (pay, promotion, supervision, coworkers, and nature of work) with the corresponding subscales in the Job Descriptive Index (JDI) that is considered one of the most carefully validated scales for measuring job satisfaction (Spector, 1997). Correlations within this comparison ranged from .61 (coworkers) to .80 (supervision) (Spector, 1997).

### **Oldenburg Burnout Inventory**

The Oldenburg Burnout Inventory (OLBI) is a 16-item survey developed in Germany which utilizes positively and negatively framed statements to assess the two main facets of occupational burnout syndrome: exhaustion and disengagement (Demerouti et al., 2007; Demerouti et al., 2003). Exhaustion is broken down into an 8-item subscale addressing the feelings of emptiness, being overtaxed from work, a strong need for rest, and a state of physical exhaustion (Demerouti et al., 2007). Disengagement is also broken down into an 8-item subscale addressing an employee's distancing from the job, as well as negative cynical attitudes and workplace behaviors (Demerouti et al., 2007). Each item within the OLBI is measured using a Likert-type scale which ranges from 1 = strongly disagree to 4 = strongly agree (Appendix B) (Demerouti et al., 2007).

The central purpose for the development of the OLBI was to provide a reliable and valid alternative to the Maslach Burnout Inventory – General Survey (MBI-GS), which was a generic adaptation branched from the MBI-Human Services Survey (Demerouti et al., 2003). The core aim for the OLBI was to overcome the generic nature of the MBI-GS while also addressing the one-sided wording of the questionnaire items (Demerouti et al., 2003). Reliability for each subscale was tested in the original study and provided a Cronbach's alpha of .73 for exhaustion and .83 for disengagement (Demerouti et al., 2003). Reliability was additionally tested by Demerouti et al. (2010) who completed a study investigating burnout of 528 South African construction employees and measured the reliability of the overall OLBI resulting with a Cronbach's alpha of .74.

The factorial validity of the OBLI was confirmed in multiple studies in the United States, Germany, and Greece which showed the two-factor structure using exhaustion and disengagement being a valid tool for measuring burnout in occupational groups (Demerouti et al., 2007). Additionally, the convergent validity of the OLBI compared to the MBI-GS was confirmed using a multi-trait multi-method approach showing the correlations of both tools was higher than  $r = .70$ , while the parallel scales correlated at  $r = .48$  or higher (Demerouti et al., 2007; Halbesleben & Demerouti, 2005).

### **Turnover Intention Scale**

The revised 6-item version of Roodt's (2004) turnover intention scale (TIS-6) is a questionnaire adapted from the unpublished original 15-item turnover intention scale. The TIS-6 assesses the intent of an employee to leave their job or organization by measuring intent (consideration) to leave, job satisfaction, achievement, work-life balance, pay, and motivation (Roodt, 2004). The TIS-6 uses a five-point Likert-type scale to rate the responses of the



participants with a midpoint score of 18, suggesting if the score is below 18 there is a desire to stay, and above 18 indicating a desire to leave (Bothma & Roodt, 2013; Nashwan et al., 2021). One advantage of using the turnover intention scale, both 15 and 6-item versions, is the tool's ability to assess intent to leave with a higher number of questions, whereas previous scales used in studies used smaller item questionnaires such as a single-item scale (Lambert, Hogan & Barton, 2001) or a three-item scale (Becker, 1992; Fox & Fallon, 2003).

The reliability of the TIS-6 has been tested through several studies, the first being a dissertation completed by Jacobs (2005) in which the researcher completed a thorough study to validate Roodt's (2004) 15-item TIS and reported a Cronbach's alpha of 0.91 (Giffen, 2015). A more recent study using the TIS-6 confirmed the reliability of the measurement scale by finding a Cronbach's alpha of 0.80 (Bothma & Roodt, 2013; Giffen, 2015). Along with providing reliability, Bothma and Roodt's (2013) study into validating the turnover intention scale found a Cronbach's alpha reliability coefficient of 0.80, while also finding support for the criterion-predictive validity to predict turnover.

### **Operationalization of Variables**

**Job Satisfaction** – Job satisfaction of an employee was measured using satisfaction with pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication (Spector, 1997).

**Burnout** – Burnout of an employee was measured on the Oldenburg Burnout Inventory using two main subscales of exhaustion and disengagement (Demerouti et al., 2003). Eight items in the inventory were used to assess the subscale of exhaustion and generically addressed feelings of emptiness, being overtaxed from work, a strong need for rest, and a state of physical exhaustion (Demerouti et al., 2003). The remaining eight items of the inventory assessed disengagement and

generically addressed an employee's distancing from their job, negative cynical attitudes, and negative workplace behaviors (Demerouti et al., 2003).

**Intent to Leave** – Intent to leave was measured using intent (consideration) to leave, personal job fulfillment, occupational frustration, changing jobs to suit personal needs, accepting another job at the same compensation level, and positive workday anticipation (Roodt, 2004).

## **Data Analysis**

### **One-Way Repeated Measures MANOVA**

The data analysis procedure used to test the first research question was a one-way repeated measures MANOVA. A one-way repeated measures MANOVA was utilized to measure multiple outcomes based on data collected on more than one response variable using multiple groups. This statistical test was used to analyze the effects of the COVID-19 pandemic on the job satisfaction, burnout, and intent to leave in mental health workers before the COVID-19 pandemic and 3 years after the beginning of the COVID-19 pandemic. Utilizing the one-way repeated measures MANOVA allowed the research to measure each participant's self-rated scores on job satisfaction, burnout, and intent to leave based on their perception of past phenomena pre-COVID-19 pandemic and 3 years after the beginning of the COVID-19 pandemic. The justification for the use of the one-way repeated measures MANOVA was to determine whether a single independent dichotomous variable, the COVID-19 pandemic, showed a difference in the three dependent interval variables, job satisfaction, burnout, and intent to leave, before the COVID-19 pandemic and 3 years after the beginning of the COVID-19 pandemic.

## **One-Way Repeated Measures MANOVA Assumptions**

### ***Independent Observations***

The first assumption for a one-way repeated measures MANOVA was the MANOVA assumes all observations are independent and the measurement for each sample is not influenced or related to the measurements of other participants (Finch, 2005). This was achieved in this study through anonymous online surveys distributed throughout participating mental health agencies and online using LinkedIn. If this assumption was not met within this study, the sampling method would have been re-evaluated and an alternative sampling method would have been chosen. It was concluded that all observations by participants were independent and not influenced by any other participant.

### ***Level and Measurement of Variables***

The second assumption for a one-way repeated measures MANOVA was the IVs are categorical and the DVs are continuous or scale (Keselman et al., 1980). This was achieved in this study by the categorical dichotomous independent variable of COVID-19, and the scale dependent variables of job satisfaction, burnout, and intent to leave being measured using a Likert-type scale. If the level and measurement of variables assumption was not met within this study, an alternative measurement method for any variable not meeting the assumption would have been chosen. All levels and measurements of the variables met the assumption in this study.

### ***Multivariate Normality***

The third assumption for a one-way repeated measures MANOVA was the response variables are multivariate and normally distributed within each group of the factor variables (Finch, 2005). If multivariate normality is not achieved within a MANOVA, chances of a Type I error would be increased (Finch, 2005). Multivariate normality was achieved in this study by a

minimum of 90 observations for each variable factor meeting the acceptable participant level as determined by the prior power analysis. Normality issues could be resolved by the removal of univariate and bivariate outliers within the data set, which reduces Type I and II errors (Osbourne & Waters, 2002). Multivariate normality was not achieved using a Shapiro-Wilks normality test with five of the six variables not reaching  $p > .05$ . Normality was assumed using the Multivariate Central Limit Theorem for MANOVA studies.

### ***Homogeneity of Variance***

The fourth assumption for a one-way repeated measures MANOVA was the variance between groups being equal (O'Brien & Kaiser, 1985). This was tested in this study by completing Box's M Test using SPSS once the data was collected (O'Brien & Kaiser, 1985). If the group variances are equal, the population covariance matrices are equal, and this assumption is met (O'Brien & Kaiser, 1985). The Box's M of 45.16 indicated that the homogeneity of covariance across the groups was assumed to be equal  $F(6, 301519.7) = 7.41, p = <.001$ .

### **Multiple Linear Regression**

The data analysis procedure used to test the second research question was a multiple linear regression. A regression analysis statistical test was utilized for examining a relationship between variables and regression models with one dependent variable and two independent variables along with the moderating variable. This statistical test was used to analyze the moderating effect of the COVID-19 pandemic on the relationship between the independent variable job satisfaction and the dependent variable of intent to leave, as well as the relationship between the independent variable burnout syndrome and intent to leave. A multiple linear regression analyzed each participant's self-rated scores on questionnaires which addressed job

satisfaction, burnout, and intent to leave to assess a possible moderating effect of the variables pre-COVID-19 pandemic and 3 years after the beginning of the COVID-19 pandemic.

### **Multiple Linear Regression Assumptions**

#### ***Homoscedasticity***

The first assumption for a multiple linear regression was the presence of homoscedasticity, to ensure minimal significant change in the size of the error across the values of the independent variable (Schützenmeister et al., 2012). Homoscedasticity can be tested by using a visual test of the scatterplot and assessing for the lack of a systematic pattern (Schützenmeister et al., 2012). If homoscedasticity was not present, and heteroscedasticity was present, the assumption would fail and to correct the path would be to transform the response variable using the square root of the values (Schützenmeister et al., 2012). This assumption was met in this study by examining a scatterplot and normal probability plot for each of the variables with no violations.

#### ***Multicollinearity***

The second assumption for a multiple linear regression, multicollinearity, assumed the independent variables were not highly correlated and was tested using variance inflation factor (VIF) values (Daoud, 2017; Uyanık & Güler, 2013). Multicollinearity cannot be detected until the researcher collects all the data and then can potentially detect the presence of the two types of multicollinearity, data-based and structural (Daoud, 2017). Data-based multicollinearity occurs due to either the poor design of the researcher or the data was simply observational, while structural multicollinearity occurs during the creation of a new independent variable from an existing variable in the study (Daoud, 2017). When using VIF to detect multicollinearity problems, if the VIF score is greater than 5, indicating a tolerance less than 0.1, then there is a

multicollinearity issue within the study (Daoud, 2017). Multicollinearity problems could be resolved by the use of an alternative statistical method such as ridge regression or partial least squares regression (Daoud, 2017). After testing for multicollinearity, the assumption was met by none of the variables exceeding a VIF value greater than 5.

### ***Normality***

The third assumption of a multiple linear regression examined normality and assumed each variable was normally distributed (Osbourne & Waters, 2002). If variables are not distributed normally, the relationships between the variables could be distorted, as well as the significance tests (Osbourne & Waters, 2002). Normality could be tested visually by inspecting the data plots, examining the skew and kurtosis, and utilizing Kolmogorov-Smirnov tests to provide statistics for normality (Osbourne & Waters, 2002). Normality issues could be resolved by the removal of univariate and bivariate outliers within the data set, which reduces Type I and II errors (Osbourne & Waters, 2002). Multivariate normality was not achieved in this study using a Shapiro-Wilks normality test with five of the six variables not reaching  $p > .05$ . Since multivariate normality was not met, normality was assumed using the Multivariate Central Limit Theorem for MANOVA studies, which asserts with at least 20 participants in a study, the multivariate normality assumption holds (Vu, 2013).

### ***Linearity***

The fourth assumption of a multiple linear regression was linearity where a linear relationship between the independent variables and the dependent variables is found (Osbourne & Waters, 2002). If the relationship of the variables is not linear within the regression, the results of the regression can underestimate the exact relationship of the variables (Osbourne & Waters, 2002). The underestimation of variables due to a linearity issue can increase chances of a Type II

error for a specific independent variable, and then increase the risk of a Type I error for each of the other independent variables (Osbourne & Waters, 2002). Three primary ways to detect non-linearity are using previous research to inform analysis, examining residual plots, and detecting curvilinearity using nonlinear regression options within statistical programs (Osbourne & Waters, 2002). A nonlinear transformation could be conducted if the assumption is not met. A scatterplot was utilized to test the linearity for the variables of COVID-19, job satisfaction, burnout, and intent to leave and found no violations within the data set.

### **Delimitations, Assumptions, and Limitations**

#### **Delimitations**

Within a study, the delimitations are defined as the characteristics that occur from the boundaries implemented by the researcher, such as exclusionary and inclusionary parameters used to define the study. Delimitations formed through specific decisions made by the researcher could include areas such as the study objectives, research questions, variables to be studied, theoretical framework, type of study (quantitative, qualitative, etc.) or the selected participants for the study.

The first delimitation of this study was the parameter of participant selection within the study. This study focused on the specific population of mental health workers, rather than medical healthcare workers, due to the abundance of research on the pandemic's effects on medical health, and gap in research for mental health workers. The second delimitation of the study was the area of chosen participants, which was Western North Carolina due to the lack of research on COVID-19 pandemic effects in the eastern United States, and specifically in North Carolina. A third delimitation of the study was the choice of theoretical framework, focusing mainly on Herzburg's motivation-hygiene theory for job satisfaction and employee burnout

syndrome explored by Graham Greene in 1961 and then further explored by Christina Maslach in 1976.

### **Assumptions**

Assumptions within a research study are the beginning foundations that enable the creation and justification for conducting the study through the beliefs of the researcher and the proposed research topic. Within this study, the first assumption made based on prior research of the COVID-19 pandemic effects on healthcare workers was the pandemic would have a negative effect on job satisfaction and increase burnout in mental health workers (Alrawashdeh et al., 2021; Arifin, 2019; Carolan & O de Visser, 2018). A second assumption made was that each participant who engaged in the online survey gave honest answers about their experience prior to the COVID-19 pandemic, as well as their current experiences during the COVID-19 pandemic. A third assumption for this study was the chosen quantitative casual-comparative research design was an effective and appropriate design for this study. A fourth assumption was that the chosen measurement tools for job satisfaction, burnout, and intent to leave provided valid and reliable data for analysis.

### **Limitations**

Limitations within a research study are defined as constraints, or barriers, beyond the control of the researcher affecting the completion and outcome of the research study, commonly originating from research design and methodology. The first limitation within this study was the selected population only represents a partial reflection of mental health employees in the state of North Carolina, and the country of the United States of America. An additional limitation within the study was the research design and potential for the participant's current experience answers on the questionnaire to skew the pre-COVID pandemic reflective answers. Additionally, the



potential for the questionnaire answers to be skewed and inaccurate would have limited the ability to make the results of the study generalizable for the variables and the population studied.

### **Summary**

Chapter 3 of this study provided an in-depth description of the two research questions used for the foundation of the study and provided three hypotheses being tested using the described data collection methods and data analysis methods. The research design and data analysis procedure were outlined and described for the study. The use of a one-way repeated measures MANOVA and multiple linear regression were explained and justified as the appropriate data analysis methods for the collected data. The participants, sampling procedures and study procedures were also discussed and justified for the completion of the study using a priori power analysis for appropriate sample size selection.

The instruments and measurement tools for the collection of data from the participants of the study were outlined and described while reliability and validity were provided for the instruments. The measurement instruments defined within the chapter were the Psychological Stress Associated with the COVID-19 Crisis Survey (Adamson, 2020), Job Satisfaction Survey (Spector, 1985), the Oldenburg Burnout Inventory (Demerouti et al., 2003) and the revised 6-item version of Roodt's (2004) Turnover Intention Scale. Additionally, the variables within the study were operationalized and the delimitations, assumptions and limitations were discussed in detail for this research study.

## CHAPTER 4: RESULTS

### Overview

The purpose of this quantitative study was to investigate the repercussions of the COVID-19 pandemic on job satisfaction, burnout syndrome, and intent to leave in mental health workers before and after the first 3 years of the COVID-19 pandemic in Western North Carolina. Furthermore, this study examined whether the timeframe prior to the onset of the COVID-19 pandemic and three years post-pandemic had a moderating effect on the relationships between job satisfaction and intent to leave, as well as the relationship between burnout and intent to leave among mental health professionals. The first research question aimed to examine the group differences of the variables job satisfaction, burnout syndrome, and intent to leave during the first three years of the COVID-19 pandemic using a one-way repeated measures MANOVA. The second research question aimed to examine the impact of the COVID-19 pandemic as a moderating factor between the relationship of job satisfaction and intent to leave, as well as the relationship of burnout and intent to leave. This impact was analyzed by using multiple linear regression.

The data collection process involved using an online survey format on JotForm to obtain quantitative data using non-probability convenience sampling methods to select participants who are mental health workers in the Western region of the state of North Carolina. The research questions that guided the study were 1) What is the difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic? 2) What moderating effect did the COVID-19 pandemic have on the relationship between job satisfaction and intent to leave, as well as burnout syndrome and intent to leave?

## Descriptive Results

A total of 103 participants completed the online survey. All participant's eligibility to participate in the survey was verified through a screening process using a check box in the survey where the participant agreed they have been employed as a mental health professional before the COVID-19 pandemic and 3 years after the beginning of the pandemic. Table 1 provides descriptive statistics for each variable within the study.

**Table 1**

### *Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
COVID-19	206	0	1	.50	.501
Job Satisfaction	206	100	206	163.79	27.313
Burnout	206	18	55	33.92	8.272
Intent To Leave	206	6	23	15.14	3.686
Valid N (listwise)	206				

Upon collection of the data, the data was screened for any entries that were duplicated or mislabeled, and no issues were found.

## Study Findings

### Research Question 1

A one-way repeated measures MANOVA,  $\alpha = .05$  (two-tailed), was utilized to investigate the research question, "What is the difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic?" The null hypothesis of the first research question was that there is no difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic.

### *Tests of Assumptions*

The following are assumptions of a one-way repeated measures MANOVA: independent observations, level and measurement of variables, multivariate normality, and homogeneity of variance and found no violations.

**Independent Observations.** The first assumption was that the MANOVA assumes all observations were independent and the measurement for each sample was not influenced or related to the measurements of other participants. This was achieved in this study through anonymous online surveys distributed throughout participating mental health agencies and online using LinkedIn.

**Level and Measurement of Variables.** The second assumption was to ensure that the independent variables are categorical, and the dependent variables were continuous or scale. This was achieved in this study by the categorical dichotomous independent variable of COVID-19, two scale independent variables of job satisfaction and burnout syndrome, and the scale dependent variable of intent to leave being measured using a Likert-type scale.

**Multivariate Normality.** The third assumption tested in this study was to ensure the response variables were multivariate and normally distributed within each group of the factor variable. Multivariate normality was not achieved using a Shapiro-Wilks normality test with five of the six variables not reaching  $p > .05$ . Normality was assumed though using the Multivariate Central Limit Theorem for MANOVA studies that states with at least 20 participants the multivariate normality assumption holds (Vu, 2013). The removal of univariate and bivariate outliers within the data set was not necessary to ensure normality.

**Homogeneity of Variance.** The fourth assumption tested was to make sure that the variance between groups was equal. This was tested in this study by completing Box's M Test

using SPSS. The Box's M of 45.16 indicated that the homogeneity of covariance across the groups was assumed to be equal  $F(6, 301519.7) = 7.41, p = <.001$  (Table 2).

**Table 2**

*Box's Test of Equality of Covariance Matrices*

Box's M	45.155
F	7.406
df1	6
df2	301519.698
Sig.	<.001

**Results of RQ1**

The analysis showed a statistically significant difference in levels of job satisfaction, burnout syndrome, and intent to leave the profession of mental health workers before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic,  $F(5, 103) = 1715.25, p < .05$ , Wilk's Lambda = .01 (Table 3). Based on the results, the null hypothesis for hypothesis one was rejected.

**Table 3**

*Multivariate Tests*

Effect		Value	F	Hypothesis df	Error df	Sig.
covid	Pillai's Trace	.989	1715.254 <sup>b</sup>	5.000	98.000	<.001
	Wilks' Lambda	.011	1715.254 <sup>b</sup>	5.000	98.000	<.001
	Hotelling's Trace	87.513	1715.254 <sup>b</sup>	5.000	98.000	<.001
	Roy's Largest Root	87.513	1715.254 <sup>b</sup>	5.000	98.000	<.001

b. Exact statistic

**Research Question 2**

A multiple linear regression,  $\alpha = .05$  (two-tailed), was used to investigate the second research question, "What moderating effect did the COVID-19 pandemic have on the relationship between job satisfaction and burnout syndrome on intent to leave?" The second research question was broken into two separate null hypotheses. The first null hypothesis (2) was

the COVID-19 pandemic does not have a moderating effect on the relationship between job satisfaction and intent to leave. The second null hypothesis (3) was the COVID-19 pandemic does not have a moderating effect on the relationship between burnout syndrome and intent to leave.

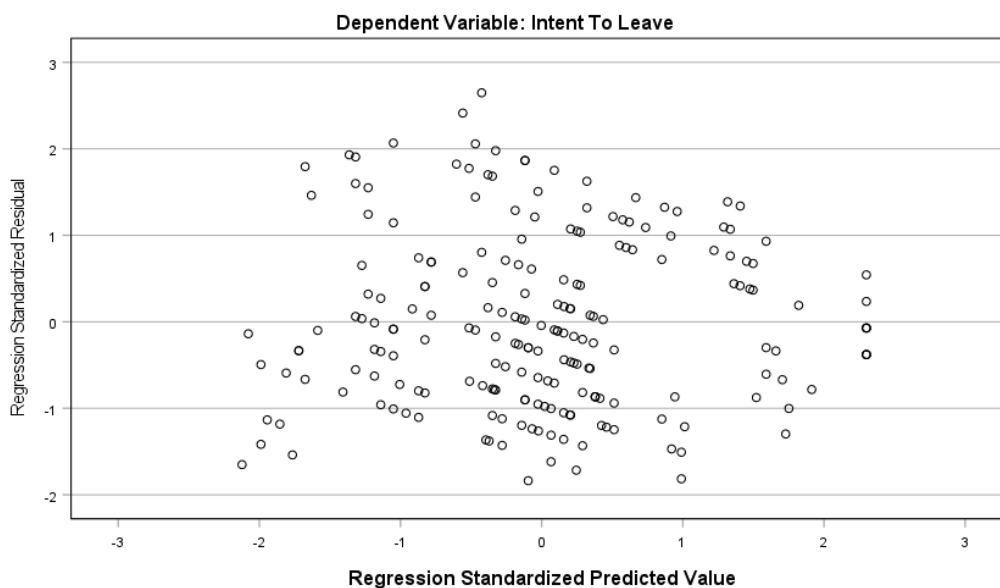
### Tests of Assumptions

The following assumptions of a Multiple Linear Regression were tested for both hypotheses within the second research question: homoscedasticity, multicollinearity, normality, and linearity and found no violations.

**Homoscedasticity, Linearity, and Normality.** For hypothesis 2, a scatterplot (Figure 1) was utilized to test the linearity, normal distribution of variables, and homoscedasticity for the variables of COVID-19, job satisfaction, and intent to leave. After examining the scatterplot there were no apparent violations within the data set. The normality assumption was assessed through examining a normal probability (P-P plot) (Figure 2).

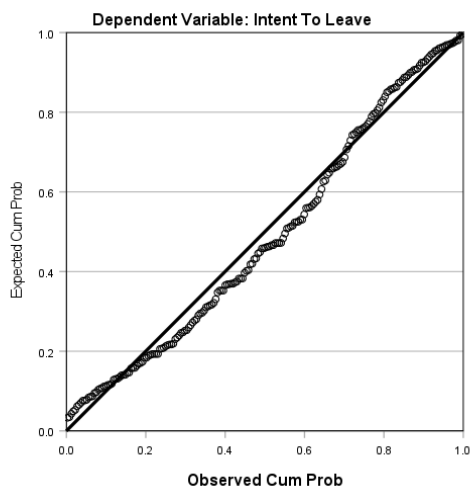
### Figure 1

*Scatterplot for Hypothesis 2*



**Figure 2**

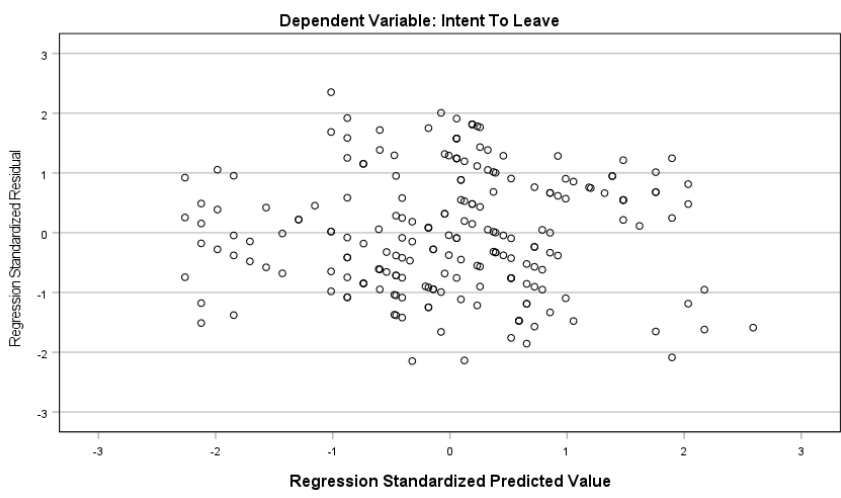
*Normality P-P Plot for Hypothesis 2*

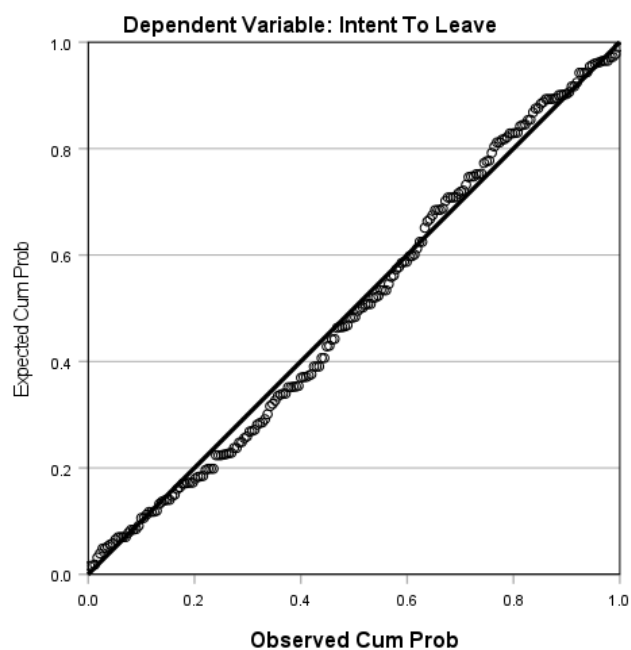


For hypothesis 3, a scatterplot (Figure 3) was utilized to test the linearity, normal distribution of variables, and homoscedasticity for the variables of COVID-19, burnout, and intent to leave. After examining the scatterplot there were no apparent violations within the data set. The normality assumption was assessed through examining a normal probability (P-P plot) (Figure 4).

**Figure 3**

*Scatterplot for Hypothesis 3*



**Figure 4***Normal P-P Plot for Hypothesis 3*

**Multicollinearity.** Multicollinearity assumption was tested by assessing the variance inflation factor (VIF) and tolerance values within the dataset. For hypothesis 2, Table 4 shows the independent variables of COVID-19 had a VIF value of 1.021 and job satisfaction had a VIF value of 1.036. Additionally, for the interaction variable of COVID and job satisfaction, the VIF value was 1.015. No value was greater than 5 which indicates that multicollinearity was not detected.

**Table 4***Coefficients for Hypothesis 2 Regression**Coefficients<sup>a</sup>*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.074	.229		-.325	.746		
	COVID (centered)	1.801	.458	.245	3.933	<.001	.979	1.021
	Job Satisfaction (centered)	-.060	.008	-.446	-7.115	<.001	.965	1.036
	Interaction: COVID * Job Satisfaction (both centered)	.038	.017	.141	2.267	.024	.985	1.015

a. Dependent Variable: Intent To Leave (centered)



For hypothesis 3, Table 5 shows the independent variables of COVID-19 had a VIF value of 1.001 and burnout had a VIF value of 1.040. Additionally, for the interaction variable of COVID and burnout, the VIF value was 1.039. No value was greater than 5 which indicates that multicollinearity was not detected.

**Table 5**

*Coefficients for Hypothesis 3 Regression*

*Coefficients<sup>a</sup>*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.014	.209		-.065	.948		
	COVID (centered)	1.412	.418	.192	3.377	<.001	.999	1.001
	Burnout (centered)	.223	.026	.500	8.618	<.001	.962	1.040
	Interaction: COVID * Burnout (both centered)	-.157	.052	-.176	-3.031	.003	.962	1.039

a. Dependent Variable: Intent To Leave (centered)

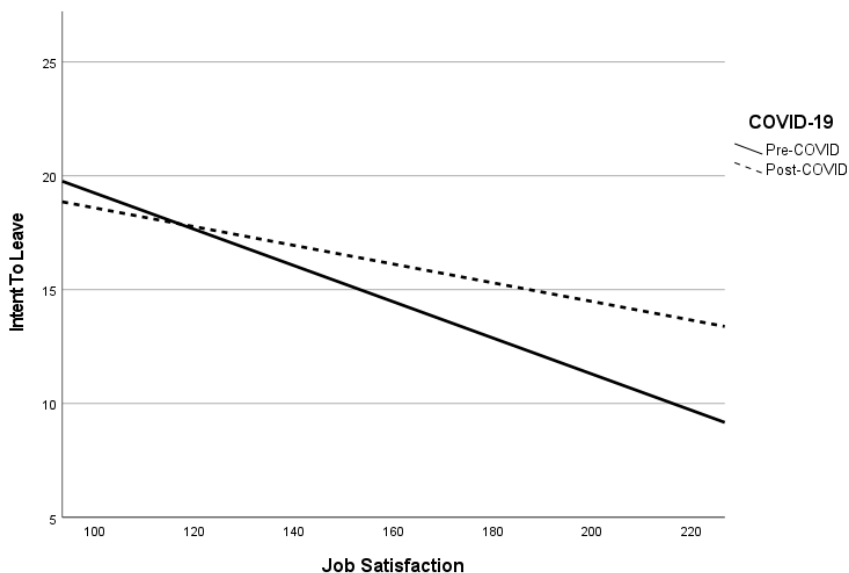
## Hypothesis 2 Results

To test the first hypothesis, a multiple linear regression was conducted to determine if the job satisfaction and intent to leave the profession for mental health workers is moderated by the COVID-19 pandemic over 3 years. The predictor variables within the equation were job satisfaction and the COVID-19 pandemic, while the outcome variable was intent to leave for mental health workers, as measured by the Turnover Intention Scale-6. The test revealed that the COVID-19 pandemic and job satisfaction explained 23% of the variance in mental health worker's intent to leave the profession ( $R^2 = .233$ ,  $F(3, 202) = 20.42$ ,  $p < .01$ ).

The regression coefficient test indicates that the COVID-19 pandemic's moderating effect on the relationship of job satisfaction, being a predictor of intent to leave, did not have a significant effect ( $\beta = .14$ ,  $t(205) = 2.27$ ,  $p = .24$ ). This means that there was not enough sufficient evidence to conclude whether the COVID-19 pandemic effected the relationships between a mental health worker's job satisfaction and intention to leave the profession during the

two time periods. Figure 5 was plotted to illustrate the interaction based on the collected data. Based on the results, the null hypothesis for hypothesis two was accepted.

**Figure 5**



### Hypothesis 3 Results

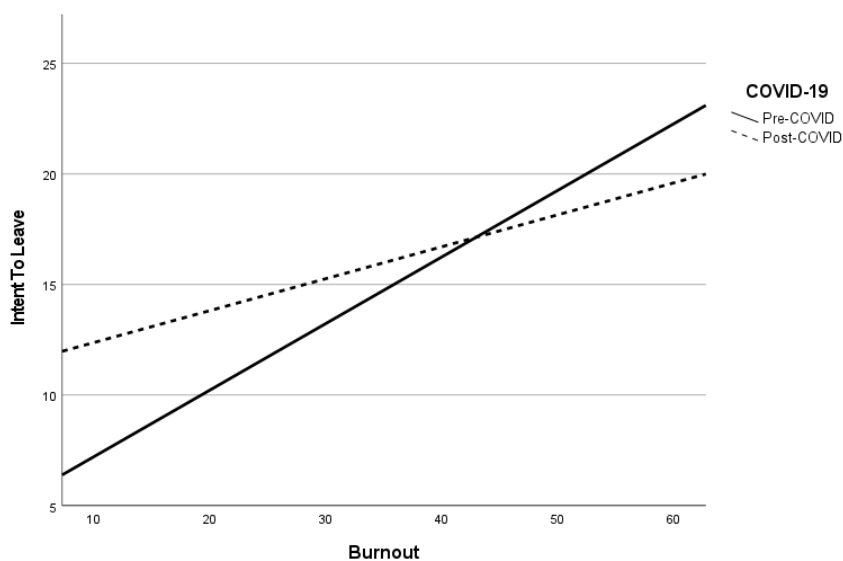
To test the third hypothesis, a multiple linear regression was conducted to determine if burnout syndrome and intent to leave the profession for mental health workers is moderated by the COVID-19 pandemic over 3 years. The predictor variables within the equation were burnout and the COVID-19 pandemic, while the outcome variable was intent to leave for mental health workers, as measured by the Turnover Intention Scale-6. The test showed that the COVID-19 pandemic and burnout syndrome explain 35% of the variance in mental health worker's intent to leave the profession, ( $R^2 = .347$ ,  $F(3, 202) = 35.78$ ,  $p < .01$ ).

The results showed that the COVID-19 pandemic's moderating effect on the relationship between burnout syndrome, being a predictor of intent to leave, showed a significant effect ( $\beta = -.18$ ,  $t(205) = -3.03$ ,  $p = .003$ ). This interaction between the two variables strengthens the relationship (Figure 6). As shown, for both pre-COVID burnout and post-COVID burnout, there

is a positive relationship with intent to leave. The plot illustrates that with pre-COVID measurements, low levels of burnout were associated with low levels of intent to leave, whereas post-COVID measurements indicated that higher levels of intent to leave is associated with lower levels of burnout. This indicates that the COVID-19 pandemic's moderating effect on the relationship between burnout and intent to leave associates higher initial levels of intent to leave with lower levels of burnout. In addition, the plot demonstrates that, in contrast, pre-COVID measurements reveal a stronger association between higher levels of burnout and intent to leave, as opposed to post-COVID measurements.

The results provide further insight that at 3 years post pandemic, mental health employees may experience an increased desire to leave the profession from lower levels of burnout, than before the pandemic. However, the results also reveal a contrasting outcome prior to the pandemic, where mental health professionals displayed an increased level of intent to leave as a result of increased reports of burnout. Potential reasons for the differences are discussed in Chapter 5. Based on the results, the null hypothesis for hypothesis 3 was rejected.

**Figure 6**



## Summary

Chapter 4 of this study described the statistical analysis used to examine the two research questions. The first research question for this study was to examine if there was a difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic. A one-way repeated measures MANOVA,  $\alpha = .05$  (two-tailed), was utilized to analyze the collected data, and the assumptions tested were independent observations, level and measurement of variables, multivariate normality, and homogeneity of variance and no violations were found. The analysis showed a statistically significant difference in levels of job satisfaction, burnout syndrome, and intent to leave the profession of mental health workers before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic ( $F(5, 103) = 1715.25, p < .05, \text{Wilk's Lambda} = .01$ ).

The second research question for this study investigated whether the COVID-19 pandemic had a moderating influence on the relationship between job satisfaction and intent to leave, as well as on the relationship between burnout and intent to leave in mental health workers before the COVID-19 pandemic and 3 years after the beginning of the COVID-19 pandemic. The second research question was broken into two separate hypotheses. A multiple linear regression,  $\alpha = .05$  (two-tailed), was utilized to analyze the data collected for the two COVID-19 time periods of job satisfaction and intent to leave. The assumptions tested were homoscedasticity, multicollinearity, normality, and linearity, and found no violations.

The results of the first regression found that the COVID-19 pandemic's moderating effect on the relationship of job satisfaction, being a predictor of intent to leave, did not have a significant effect ( $\beta = .14, t(205) = 2.27, p = .24$ ). The result could not be used to predict whether

there was a change in the relationship of the variables. The results of the second regression showed that the COVID-19 pandemic's moderating effect on the relationship between burnout syndrome, being a predictor of intent to leave, showed a significant effect ( $\beta = -.18$ ,  $t(205) = -3.03$ ,  $p = .003$ ). This interaction between the two variables strengthens the relationship.

## CHAPTER 5: DISCUSSION

### Overview

The purpose of this quantitative study was to examine the COVID-19 pandemic's effect on the relationships between job satisfaction, burnout syndrome, and intent to leave in mental health workers before and after the first 3 years of the COVID-19 pandemic in Western North Carolina. Additionally, this study investigated whether the timeframe prior to the onset of the COVID-19 pandemic and three years post-pandemic had a moderating effect on the relationships between job satisfaction and intent to leave, as well as the relationship between burnout and intent to leave among mental health professionals. This study utilized a single dichotomous independent variable of the COVID-19 pandemic, two scale independent variables of job satisfaction and burnout syndrome, and one scale dependent variable of intent to leave.

This chapter provides a summary of the findings within the study and conducts an in-depth discussion of the findings. The discussion explores what the findings indicate, how they compare to the literature review and how the findings contribute to theory and biblical foundations. Additionally, implications, limitations and recommendations for future research are discussed based on the study findings and are summarized in the conclusion.

### Summary of Findings

The first research question for this study was to examine if there is a difference between mental health workers in Western North Carolina self-reported levels of job satisfaction, burnout syndrome, and intent to leave the profession between before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic. Analysis results from a one-way repeated measures MANOVA,  $\alpha = .05$  (two-tailed), showed a statistically significant difference in levels of job satisfaction, burnout syndrome, and intent to leave the profession of mental health before the

COVID-19 pandemic and after 3 years of the COVID-19 pandemic,  $F(5, 103) = 1715.25, p < .05$ , Wilk's Lambda = .01.

The second research question for this study was to investigate whether a 3-year period of the COVID-19 pandemic had a moderating effect on the relationships between job satisfaction and intent to leave, as well as the relationship between burnout and intent to leave among mental health professionals. The results of the first regression found that the COVID-19 pandemic's moderating effect on the relationship of job satisfaction, being a predictor of intent to leave, did not have a statistically significant effect ( $\beta = .14, t(205) = 2.27, p = .24$ ). The result could not be used to predict whether the relationship of the variables was impacted due to the COVID-19 pandemic. The results of the second regression showed that the COVID-19 pandemic's moderating effect on the relationship between burnout syndrome, being a predictor of intent to leave, showed a significant effect ( $\beta = -.18, t(205) = -3.03, p = .003$ ). The study's findings suggested that the COVID-19 pandemic's impact as a moderating variable strengthened the relationship between occupational burnout acting as a predictor of intent to leave. Specifically, higher levels of self-reported burnout after the beginning of the pandemic were linked to higher levels of self-reported intent to leave the mental health profession.

## **Discussion of Findings**

### **Motivational-Hygiene Theory**

Motivational-hygiene theory and the JD-R model were utilized as the theoretical framework for this study. Herzberg's motivation-hygiene theory has been a highly used theory for testing job satisfaction with a specific target of job satisfaction in healthcare workers (Alshmemri et al., 2017). The motivation-hygiene theory focuses on the idea of two present motivating factors affecting job satisfaction for an employee, intrinsic, and extrinsic factors

(Alshmemri et al., 2017; Wernimont, 1966). Research has been conducted to understand the importance placed by employees on intrinsic and extrinsic factors, and how those factors affect job satisfaction (Huang & Van De Vliert, 2003). The study's findings provide further knowledge to this theory through results that showed a strong extrinsic factor (COVID-19) can influence the job satisfaction of employees.

### **Job Demands-Resources Model**

The job demands-resources (JD-R) model is a widely used model to address occupational health and employee well-being (Demerouti et al., 2001; Lesener et al., 2018). The JD-R model is also used for understanding and investigating occupational burnout syndrome in employees (Demerouti et al., 2003). The central foundation of the JD-R focuses on the working conditions to detect the consequences specific to occupational environmental stressors (Demerouti et al., 2001; Lesener et al., 2018). This study focused on how the potential change in working conditions due to the COVID-19 pandemic affected burnout in the mental health occupational setting.

Results of this study found that the COVID-19 pandemic is associated with a higher presence of occupational burnout in the mental health profession during the first 3 years of the pandemic. Additionally, the results indicated that mental health employees may experience an increased desire to leave the profession during lower onset levels of burnout, as compared to before the pandemic. This finding helps to extend the knowledge in previous research that an extraordinary event, such as a pandemic, could be considered as an extrinsic stressor in an occupational setting that could effect an employee in many areas, such as increasing levels of self-reported burnout, potentially effecting their retention within the profession. However, it should be noted that the results also revealed a contrasting outcome at higher levels of reported



burnout. Prior to the pandemic, mental health professionals reported increased levels of intent to leave the profession as a result of higher reported levels of burnout, rather than 3 years post-COVID.

### **Biblical Foundations**

The two major biblical foundations used for this study focused on the human need for salvation and the ability to learn through trials and tribulations. The results of this study provide insight into how the COVID-19 increased hardship on mental health employees. Natural disasters such as a pandemic can provide an opportunity to rekindle, or seek, a relationship with God and salvation through Christ can provide an opportunity to trust in Christ by allowing Him to provide truths, strength, and comfort through doubts and trials in an occupational setting.

The second biblical foundation tied into the results of the study through learning how to trust God during the trails of life. With additional knowledge of the effect of the COVID-19 pandemic on mental health workers, the need to trust in the Lord's will is crucial for finding peace during a difficult time. An individual's relationship with God can be tested during times of trials and tribulations, which makes it ever more important to strengthen the relationship with God through prayer and scripture.

### **Implications**

The motivation-hygiene theory and the JD-R model both have goals of understanding human behavior in an occupational setting. While the motivation-hygiene theory focuses on how intrinsic and extrinsic factors can affect job satisfaction, the JD-R model focuses on understanding causes of occupational burnout syndrome in employees due to consequences specific to occupational environmental stressors. The findings in this study, using the motivation-hygiene theory, provide implications suggesting increased occupational support of mental health

workers in the post-COVID-19 era to help improve and/or maintain job satisfaction levels.

Administrative support and focus on job satisfaction levels can promote and improve retention within the profession and create a healthy, positive work environment for employees which can lead to increased therapeutic effectiveness.

Implications of this study's findings for the JD-R model promote the need for increased occupational support of mental health workers in the post-COVID-19 era to reduce burnout syndrome. Administrative support can come in numerous areas such as additional paid time off, improved Employee Assistance Programs (EAP), increased pay/bonuses based on amount of potential exposure within job duties, and increased recognition of appreciation (e.g. award programs, staff appreciation events, and occupational perks) (Ellett et al., 2007; Garland, 2004). Providing increased support for mental health employees can lead to increased employee output and higher quality of work, along with potential increased retention rates (Ellett et al., 2007; Garland, 2004). A study completed by Lasalvia et al. (2009) examined the influence of perceived organization factors, including administrative support, and how those factors contributed to the overall mental health of workers, with a focus on burnout. Their findings suggested that improving the atmosphere of the workplace through administrative support can lead to less burnout, higher retention rates and increased quality of work which in turn lead to higher quality of care (Lasalvia et al., 2009). Additionally, the implications of this study can be used to promote continued research on the effect of the COVID-19 pandemic on job satisfaction, burnout, and retention levels of mental health workers or within different professional avenues.

### **Limitations**

The first limitation discussed for this study was the selected population only represents a partial reflection of mental health employees in the state of North Carolina, and the country of

the United States of America. This limitation applies due to the limited geographical area surveyed for the study. A second limitation discussed was the potential for the participant's questionnaire answers for current experience (state of job satisfaction, burnout, and intent to leave) to skew the pre-COVID pandemic reflective answers. The use of previous self-reported data collected before the COVID-19 pandemic by previous research studies could be used for a between-subjects study, rather than a within-subjects study requiring the participants to self-report their previous feelings. The final potential limitation presented was for the possibility of the questionnaire answers to be skewed and inaccurate, which would limit the ability to make the results of the study generalizable for the variables and the population studied. An additional limitation discovered after the completion of the study was the need for a larger participant group to ensure the multivariate normality assumption could be met for increased validity. This study was forced to use assume normality using the Multivariate Central Limit Theorem for MANOVA studies that states with at least 20 participants the multivariate normality assumption holds (Vu, 2013).

### **Recommendations for Future Research**

This research study was initiated to better understand how the COVID-19 pandemic affected mental health workers in areas of job satisfaction, burnout, and intent to leave the profession. Mental health employees were asked to fill out an online survey that assessed the three areas of the study, first by answering the questions based on memories and recalling how they felt, and a second time on how they feel currently in their profession. This study focused on mental health workers primarily in western North Carolina and I recommend continued research in larger geographical areas around the United States or other countries to provide a clearer picture of the results. Broadening the geographical study area would give researchers a better

understanding of how the COVID-19 pandemic affected mental health workers in different cultures. Additionally, future research on the effect of the COVID-19 pandemic on different professions would provide knowledge to employers regarding increased support, while also providing insight for employees to increase self-care.

### **Summary**

This chapter provided a summary of the findings within the study with an in-depth discussion of the findings to assess how they compared to the literature review and contributed to the motivation-hygiene theory, JD-R model, and biblical foundations. Implications of this study supported the need for increased support for mental health workers due to the effects of the COVID-19 pandemic. Limitations of the study included the geographical area, participant size, and the data collection process. Recommendations for future research are needed to better understand how the COVID-19 pandemic affects mental health employees in different geographical areas, as well as studying the effect on different professions.

The purpose of this study was to investigate the effect of COVID-19 pandemic on job satisfaction, burnout syndrome, and intent to leave in mental health workers. The results of the study showed a statistically significant difference in levels of job satisfaction, burnout syndrome, and intent to leave the profession of mental health before the COVID-19 pandemic and after 3 years of the COVID-19 pandemic. Additionally, the research provided knowledge that the initial 3-year period of the COVID-19 pandemic acted as a significant moderator for the relationship of burnout and intent to leave, but not for job satisfaction and intent to leave. By understanding how the COVID-19 pandemic affects mental health workers, employers can work to increase support of their employees, and employees can use this knowledge to increase proactive efforts to mitigate the potential for burnout and emphasize self-care.

## REFERENCES

- Abdullah, W., & Nusari, M. (2019). The relationship between nurses' job satisfaction and nurses' performance in the public health care sector in Yemen. *International Journal of Management and Human Science (IJMHS)*, 3(2), 23–43.
- Adamson, M. (2020, May 14). *Psychological stress associated with the covid-19 crisis (14)*. National Institute of Environmental Health Sciences - COVID-19 OBSSR Research Tools. [https://www.nlm.nih.gov/dr2/Psychological\\_Stress\\_Associated\\_with\\_the\\_COVID-19\\_Crisis\\_14.pdf](https://www.nlm.nih.gov/dr2/Psychological_Stress_Associated_with_the_COVID-19_Crisis_14.pdf)
- Ahmad, N., Iqbal, N., Javed, K., & Hamad, N. (2014). Impact of organizational commitment and employee performance on the employee satisfaction. *International Journal of Learning, Teaching and Educational Research*, 1(1), 84–92.
- Agarwal, S. D., Pabo, E., Rozenblum, R., & Sherritt, K. M. (2020). Professional dissonance and burnout in primary care. *JAMA Internal Medicine*, 180(3), 395. <https://doi.org/10.1001/jamainternmed.2019.6326>
- Al Kurdi, B., Alshurideh, M., & Alnaser, A. (2020). The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning. *Management Science Letters*, 3561–3570. <https://doi.org/10.5267/j.msl.2020.6.038>
- Aloisio, L. D., Gifford, W. A., McGilton, K. S., Lalonde, M., Estabrooks, C. A., & Squires, J. E. (2018). Individual and organizational predictors of Allied Healthcare Providers' job satisfaction in residential long-term care. *BMC Health Services Research*, 18(1). <https://doi.org/10.1186/s12913-018-3307-3>

- Alrawashdeh, H. M., Al-Tammemi, A. B., Alzawahreh, M. K., Al-Tamimi, A., Elkholy, M., Al Sarireh, F., Abusamak, M., Elehamer, N. M., Malkawi, A., Al-Dolat, W., Abu-Ismail, L., Al-Far, A., & Ghoul, I. (2021). Occupational burnout and job satisfaction among physicians in times of covid-19 crisis: A convergent parallel mixed-method study. *BMC Public Health*, 21(1). <https://doi.org/10.1186/s12889-021-10897-4>
- Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's two-factor theory. *Life Science Journal*, 14(5), 12–16. <https://doi.org/10.7537/marslsj140517.03>
- Anand, P. V. (2019). Occupational Stress: Relationship with Emotional Intelligence and Coping Self-Efficacy. *Journal of Organisation and Human Behaviour*, 8(1), 33-39.
- Arakawa, R., & Yakura, H. (2020). Inward: A computer-supported tool for video-reflection improves efficiency and effectiveness in executive coaching. *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*.  
<https://doi.org/10.1145/3313831.3376703>
- Arifin, K. (2019). Factors influencing employee attitudes toward organizational change: Literature review. *Advances in Social Science, Education and Humanities Research*, 395, 188–191.
- Arnold, K. A. (2017). Transformational leadership and employee psychological well-being: A review and directions for future research. *Journal of Occupational Health Psychology*, 22(3), 381–393. <https://doi.org/10.1037/ocp0000062>
- Azeez, S. (2017). Human Resource Management Practices and Employee Retention: A Review of Literature. *Journal of Economics, Management and Trade*, 18(2), 1–10.  
<https://doi.org/10.9734/jemt/2017/32997>

- Badrianto, Y., & Ekhsan, M. (2020). Effect of work environment and job satisfaction on employee performance in PT Neginak industries. *Journal of Business, Management, and Accounting*, 2(1), 85–91.
- Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-ncov epidemic: Address Mental Health Care To Empower Society. *The Lancet*, 395(10224). [https://doi.org/10.1016/s0140-6736\(20\)30309-3](https://doi.org/10.1016/s0140-6736(20)30309-3)
- Bang, H., & Reio Jr, T. G. (2017). Examining the role of cynicism in the relationships between burnout and employee behavior. *Journal of Work and Organizational Psychology*, 33(3), 217–228. <https://doi.org/10.1016/j.rpto.2017.07.002>
- Batista, L., & Reio, T. G. (2019). Occupational stress and instigator workplace incivility as moderated by personality: A test of an occupational stress and workplace incivility model. *Journal of Organizational Psychology*, 19(2), 38–49. <https://doi.org/10.33423/jop.v19i2.2042>
- Benfante, A., Di Tella, M., Romeo, A., & Castelli, L. (2020). Traumatic stress in healthcare workers during COVID-19 pandemic: A review of the immediate impact. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.569935>
- Bojdani, E., Rajagopalan, A., Chen, A., Gearin, P., Olcott, W., Shankar, V., Cloutier, A., Solomon, H., Naqvi, N. Z., Batty, N., Festin, F. E., Tahera, D., Chang, G., & DeLisi, L. E. (2020). Covid-19 pandemic: Impact on psychiatric care in the United States. *Psychiatry Research*, 289, 113069. <https://doi.org/10.1016/j.psychres.2020.113069>
- Bothma, C. F. C., & Roodt, G. (2013). The validation of the turnover intention scale. *SA Journal of Human Resource Management*, 11(1). <https://doi.org/10.4102/sajhrm.v11i1.507>

- Carolan, S. & O de Visser, R. (2018). Employees' perspectives on the facilitators and barriers to engaging with digital mental health interventions in the workplace: Qualitative study. *JMIR Mental Health International Journal of Scientific Research in Science, Engineering and Technology*, 425–431. <https://doi.org/10.32628/ijrst195463>
- Centers for Disease Control and Prevention. (n.d.). *Symptoms of COVID-19*. Centers for Disease Control and Prevention. from <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>
- Chemali, Z., Ezzeddine, F. L., Gelaye, B., Dossett, M. L., Salameh, J., et al. (2019). Burnout among healthcare providers in the complex environment of the Middle East: A systematic review. *BMC Public Health*, 19(1), 1-21. <https://doi.org/10.1186/s12889-019-7713-1>.
- Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, ocbs, and performance. *Journal of Applied Psychology*, 93(5), 1082–1103. <https://doi.org/10.1037/0021-9010.93.5.1082>
- Choy, M. W., & Kamoche, K. (2020). Identifying stabilizing and destabilizing factors of job change: A qualitative study of employee retention in the Hong Kong travel agency industry. *Current Issues in Tourism*, 24(10), 1375–1388. <https://doi.org/10.1080/13683500.2020.1792853>
- Chung, J. P. Y., & Yeung, W.-song. (2020). Staff mental health self-assessment during the COVID-19 outbreak. *East Asian Archives of Psychiatry*, 30(1), 34–34. <https://doi.org/10.12809/eaap2014>



- Cotel, A., Golu, F., Pantea Stoian, A., Dimitriu, M., Socea, B., Cirstoveanu, C., Davitoiu, A. M., Jacota Alexe, F., & Oprea, B. (2021). Predictors of burnout in healthcare workers during the COVID-19 pandemic. *Healthcare*, 9(3), 304.  
<https://doi.org/10.3390/healthcare9030304>
- Cullen, W., Gulati, G., & Kelly, B. D. (2020). Mental health in the COVID-19 pandemic. *QJM: An International Journal of Medicine*, 113(5), 311–312.  
<https://doi.org/10.1093/qjmed/hcaa110>
- D’Agostino, A., Demartini, B., Cavallotti, S., & Gambini, O. (2020). Mental Health Services in Italy during the COVID-19 Outbreak. *The Lancet Psychiatry*, 7(5), 385–387.  
[https://doi.org/10.1016/s2215-0366\(20\)30133-4](https://doi.org/10.1016/s2215-0366(20)30133-4)
- Dal Corso, L., De Carlo, A., Carluccio, F., Colledani, D., & Falco, A. (2020). Employee burnout and positive dimensions of well-being: A latent workplace spirituality profile analysis. *PLoS ONE*, 15(11). <https://doi.org/10.1371/journal.pone.0242267>
- Daoud, J. I. (2017). Multicollinearity and regression analysis. *Journal of Physics: Conference Series*, 949, 012009. <https://doi.org/10.1088/1742-6596/949/1/012009>
- De Hert, S. (2020). Burnout in healthcare workers: Prevalence, impact and preventative strategies. *Local and Regional Anesthesia*, Volume 13, 171–183.  
<https://doi.org/10.2147/lra.s240564>
- Day, A., Crown, S. N., & Ivany, M. (2017). Organisational change and employee burnout: The moderating effects of support and job control. *Safety Science*, 100, 4–12.  
<https://doi.org/10.1016/j.ssci.2017.03.004>

- de Haan, E., Culpin, V., & Curd, J. (2011). Executive coaching in practice: What determines helpfulness for clients of coaching? *Personnel Review*, 40(1), 24–44.  
<https://doi.org/10.1108/004834811111095500>
- de Haan, E., Grant, A. M., Burger, Y., & Eriksson, P.-O. (2016). A large-scale study of executive and workplace coaching: The relative contributions of relationship, personality match, and self-efficacy. *Consulting Psychology Journal: Practice and Research*, 68(3), 189–207. <https://doi.org/10.1037/cpb0000058>
- de Haan, E., Gray, D. E., & Bonneywell, S. (2019). Executive coaching outcome research in a field setting: A near-randomized controlled trial study in a Global Healthcare Corporation. *Academy of Management Learning & Education*, 18(4), 581–605.  
<https://doi.org/10.5465/amle.2018.0158>
- de Lima, C. V., Cândido, E. L., da Silva, J. A., Albuquerque, L. V., Soares, L. de, do Nascimento, M. M., de Oliveira, S. A., & Neto, M. L. (2020). Effects of quarantine on mental health of populations affected by covid-19. *Journal of Affective Disorders*, 275, 253–254. <https://doi.org/10.1016/j.jad.2020.06.063>
- Demerouti, E., & Bakker, A. B. (2007). The Oldenburg burnout inventory: A good alternative to measure burnout (and engagement). In *Handbook of stress and burnout in health care* (pp. 1–25). essay, Nova Science Publishers.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.  
<https://doi.org/10.1037/0021-9010.86.3.499>

- Demerouti, E., Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments. *European Journal of Psychological Assessment, 19*(1), 12–23. <https://doi.org/10.1027/1015-5759.19.1.12>
- Demerouti, E., Mostert, K., & Bakker, A. B. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology, 15*(3), 209–222. <https://doi.org/10.1037/a0019408>
- Demirhan, R. (2020). The effect of hospital organization on treatment during covid-19 pandemic. *Southern Clinics of Istanbul Eurasia*. <https://doi.org/10.14744/scie.2020.32154>
- Deng, J., Guo, Y., Ma, T., Yang, T., & Tian, X. (2019). How job stress influences job performance among Chinese Healthcare Workers: A cross-sectional study. *Environmental Health and Preventive Medicine, 24*(1). <https://doi.org/10.1186/s12199-018-0758-4>
- Dinibutun, S. R. (2020). Factors associated with burnout among physicians: An evaluation during a period of covid-19 pandemic. *Journal of Healthcare Leadership, Volume 12*, 85–94. <https://doi.org/10.2147/jhl.s270440>
- Diamantidis, A. D., & Chatzoglou, P. (2019). Factors affecting employee performance: an empirical approach. *International Journal of Productivity and Performance Management, 68*(1), 171–193. <https://doi.org/10.1108/ijppm-01-2018-0012>
- Dreison, K. C., Luther, L., Bonfils, K. A., Sliter, M. T., McGrew, J. H., & Salyers, M. P. (2018). Job burnout in mental health providers: A meta-analysis of 35 years of intervention research. *Journal of Occupational Health Psychology, 23*(1), 18–30. <https://doi.org/10.1037/ocp0000047>

- Duan, L., & Zhu, G. (2020). Psychological interventions for people affected by the covid-19 epidemic. *The Lancet Psychiatry*, 7(4), 300–302. [https://doi.org/10.1016/s2215-0366\(20\)30073-0](https://doi.org/10.1016/s2215-0366(20)30073-0)
- Dunnette, M. D., Campbell, J. P., & Hakel, M. D. (1967). Factors contributing to job satisfaction and job dissatisfaction in six occupational groups. *Organizational Behavior and Human Performance*, 2(2), 143–174. [https://doi.org/10.1016/0030-5073\(67\)90027-x](https://doi.org/10.1016/0030-5073(67)90027-x)
- Eliyana, A., Ma'arif, S., & Muzakki. (2019). Job satisfaction and organizational commitment effect in the transformational leadership towards employee performance. *European Research on Management and Business Economics*, 25(3), 144–150. <https://doi.org/10.1016/j.iedeen.2019.05.001>
- English Standard Version Bible*. (2001). ESV Online. <https://esv.literalword.com/>
- Felton, J. S. (1998). Burnout as a clinical entity—its importance in health care workers. *Occupational Medicine*, 48(4), 237–250. <https://doi.org/10.1093/occmed/48.4.237>
- Finch, H. (2005). Comparison of the performance of nonparametric and parametric MANOVA test statistics when assumptions are violated. *Methodology*, 1(1), 27–38. <https://doi.org/10.1027/1614-1881.1.1.27>
- Fiorillo, A., & Gorwood, P. (2020). The consequences of the COVID-19 pandemic on Mental Health and implications for clinical practice. *European Psychiatry*, 63(1). <https://doi.org/10.1192/j.eurpsy.2020.35>
- Gabriel, K. P., & Aguinis, H. (2021). How to prevent and combat employee burnout and create healthier workplaces during crises and beyond. *Business Horizons*. <https://doi.org/10.1016/j.bushor.2021.02.037>

Galea, S., Merchant, R. M., & Lurie, N. (2020). The mental health consequences of covid-19 and physical distancing. *JAMA Internal Medicine*, 180(6), 817.

<https://doi.org/10.1001/jamainternmed.2020.1562>

Gan, G. C., Chong, C. W., Yuen, Y. Y., Yen Teoh, W. M., & Rahman, M. S. (2020). Executive coaching effectiveness: Towards sustainable business excellence. *Total Quality Management & Business Excellence*, 32(13-14), 1405–1423.

<https://doi.org/10.1080/14783363.2020.1724507>

Garland, B. (2004). The impact of administrative support on prison treatment staff Burnout: An exploratory study. *The Prison Journal*, 84(4), 452–471.

<https://doi.org/10.1177/0032885504269343>

Gauche, C., De Beer, L. T., & Brink, L. (2017). Managing employee well-being: A qualitative study exploring job and personal resources of at-risk employees. *SA Journal of Human Resource Management*, 1(2). <https://doi.org/10.4102/sajhrm.v15i0.957>

Giffen, R. (2015). *Organizational culture and personality type: Relationship with person-organization fit and turnover intention* (dissertation). Iowa State University Digital Repository, Ames, Iowa.

Grover, S., Mehra, A., Sahoo, S., Avasthi, A., Tripathi, A., D'Souza, A., Saha, G., Jagadhisha, A., Gowda, M., Vaishnav, M., Singh, O., Dalal, P. K., & Kumar, P. (2020). State of mental health services in various training centers in India during the lockdown and covid-19 pandemic. *Indian Journal of Psychiatry*, 62(4), 363.

[https://doi.org/10.4103/psychiatry.indianjpsychiatry\\_567\\_20](https://doi.org/10.4103/psychiatry.indianjpsychiatry_567_20)

- Gunnell, D., Appleby, L., Arensman, E., Hawton, K., John, A., Kapur, N., Khan, M., O'Connor, R. C., Pirkis, J., Appleby, L., Arensman, E., Caine, E. D., Chan, L. F., Chang, S.-S., Chen, Y.-Y., Christensen, H., Dandona, R., Eddleston, M., Erlangsen, A., ... Yip, P. S. F. (2020). Suicide risk and prevention during the COVID-19 pandemic. *The Lancet Psychiatry*, 7(6), 468–471. [https://doi.org/10.1016/s2215-0366\(20\)30171-1](https://doi.org/10.1016/s2215-0366(20)30171-1)
- Halbesleben, J. R., & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. *Work & Stress*, 19(3), 208–220. <https://doi.org/10.1080/02678370500340728>
- Hayajneh, N., Suifan, T., Obeidat, B., Abuhashesh, M., Alshurideh, M., & Masa'deh, R. (2021). The relationship between organizational changes and job satisfaction through the mediating role of job stress in the Jordanian telecommunication sector. *Management Science Letters*, 315–326. <https://doi.org/10.5267/j.msl.2020.8.001>
- Hendri, M. I. (2019). The mediation effect of job satisfaction and organizational commitment on the organizational learning effect of the employee performance. *International Journal of Productivity and Performance Management*, 68(7), 1208–1234. <https://doi.org/10.1108/ijppm-05-2018-0174>
- Hidayah, T., & Tobing, D. S. K. (2018). The influence of job satisfaction, motivation, and organizational commitment to employee performance. *International Journal of Scientific & Technology Research*, 7(7), 122–127.
- Hidayat, A. S., & Agustina, A. (2020). Employee burnout vs employee engagement and its impact on turnover intention. *Proceedings of the 1st International Conference on Accounting, Management and Entrepreneurship (ICAMER 2019)*, 1(123). <https://doi.org/10.2991/aebmr.k.200305.004>

- Huang, X., & Van De Vliert, E. (2003). Where intrinsic job satisfaction fails to work: National moderators of intrinsic motivation. *Journal of Organizational Behavior*, 24(2), 159–179. <https://doi.org/10.1002/job.186>
- Inceoglu, I., Thomas, G., Chu, C., Plans, D., & Gerbasi, A. (2018). Leadership behavior and employee well-being: An integrated review and a future research agenda. *The Leadership Quarterly*, 29(1), 179–202. <https://doi.org/10.1016/j.leaqua.2017.12.006>
- Jacobs, E. J. (2005). *The development of a predictive model of turnover intentions of professional nurses* [Unpublished doctoral dissertation, University of Johannesburg].
- Jain, S., Khurana, N., & Soni, B. (2019). Effect of collaboration through social media on collaborative overload, burnout and employee engagement. *Journal of Applied Sciences Research*, 15(2), 1–4. <https://doi.org/10.22587/jasr.2019.15.2.1>
- Janeway, D. (2020). The role of psychiatry in treating burnout among nurses during the covid-19 pandemic. *Journal of Radiology Nursing*, 39(3), 176–178. <https://doi.org/10.1016/j.jradnu.2020.06.004>
- Kalshoven, K., & Boon, C. T. (2012). Ethical Leadership, Employee Well-Being, and Helping. *Journal of Personnel Psychology*, 11(1), 60–68. <https://doi.org/10.1027/1866-5888/a000056>
- Kanfer, R., Chen, G., & Pritchard, R. D. (Eds.). (2012). *Work motivation: Past, present and future*. Routledge.
- Karakas, F. (2009). Spirituality and performance in organizations: A literature review. *Journal of Business Ethics*, 94(1), 89–106. <https://doi.org/10.1007/s10551-009-0251-5>

- Kelly, R. J., & Herald, L. R. (2020). Burnout and leadership style in behavioral health care: A literature review. *The Journal of Behavioral Health Services & Research*, 47(4), 581–600.  
<https://doi.org/10.1007/s11414-019-09679-z>
- Keselman, H. J., Rogan, J. C., Mendoza, J. L., & Breen, L. J. (1980). Testing the validity conditions of repeated measures F tests. *Psychological Bulletin*, 87(3), 479–481.  
<https://doi.org/10.1037/0033-2909.87.3.479>
- Khosravi, M., Ghiasi, Z., & Ganjali, A. (2021). Burnout in hospital medical staff during the COVID-19 pandemic: Diagnosis, treatment, and prevention. *Journal of Natural Remedies*, 21(12), 36–44.
- Kinman, G., Teoh, K., & Harriss, A. (2020). Supporting the well-being of healthcare workers during and after COVID-19. *Occupational Medicine*, 70(5), 294–296.  
<https://doi.org/10.1093/occmed/kqaa096>
- Koon, V.-Y., & Pun, P.-Y. (2017). The mediating role of emotional exhaustion and job satisfaction on the relationship between job demands and instigated workplace incivility. *The Journal of Applied Behavioral Science*, 54(2), 187–207.  
<https://doi.org/10.1177/0021886317749163>
- Koropets, O., Fedorova, A., & Dvorakova, Z. (2020). The impact of toxic management on staff burnout. *Advances in Economics, Business and Management Research*, 128, 1808–1812.  
<https://doi.org/10.2991/aebmr.k.200312.251>



Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Network Open*, 3(3).

<https://doi.org/10.1001/jamanetworkopen.2020.3976>

Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, 8(1).

<https://doi.org/10.1525/collabra.33267>

Lasalvia, A., Bonetto, C., Bertani, M., Bissoli, S., Cristofalo, D., Marrella, G., Ceccato, E., Cremonese, C., De Rossi, M., Lazzarotto, L., Marangon, V., Morandin, I., Zucchetto, M., & Tansella, M. (2009). Influence of perceived organisational factors on job burnout: Survey of community mental health staff. *British Journal of Psychiatry*, 195(6), 537–544.

<https://doi.org/10.1192/bjp.bp.108.060871>

Lesener, T., Gusy, B., & Wolter, C. (2018). The job demands-resources model: A meta-analytic review of Longitudinal Studies. *Work & Stress*, 33(1), 76–103.

<https://doi.org/10.1080/02678373.2018.1529065>

Liem, A., Wang, C., Wariyanti, Y., Latkin, C. A., & Hall, B. J. (2020). The neglected health of international migrant workers in the COVID-19 epidemic. *The Lancet Psychiatry*, 7(4).

[https://doi.org/10.1016/s2215-0366\(20\)30076-6](https://doi.org/10.1016/s2215-0366(20)30076-6)

Liu, S., Yang, L., Zhang, C., Xiang, Y.-T., Liu, Z., Hu, S., & Zhang, B. (2020). Online mental health services in China during the COVID-19 Outbreak. *The Lancet Psychiatry*, 7(4).

[https://doi.org/10.1016/s2215-0366\(20\)30077-8](https://doi.org/10.1016/s2215-0366(20)30077-8)

- Louis, K. S., & Murphy, J. (2017). Trust, caring and organizational learning: the leader's role. *Journal of Educational Administration*, 55(1), 103–126. <https://doi.org/10.1108/jea-07-2016-0077>
- Ma, W. (2021). The relationship between job burnout and psychological contract of employee from the perspective of organizational psychology. *Journal of Psychological Research*, 3(1), 16–21. <https://doi.org/10.30564/jpr.v3i1.2685>
- Mahoney, C. B., Lea, J., Schumann, P. L., & Jillson, I. A. (2020). Turnover, burnout, and job satisfaction of certified registered nurse anesthetists in the United States: Role of job characteristics and personality. *AANA Journal*, 88(1).
- Marques, L., Bartuska, A. D., Cohen, J. N., & Youn, S. J. (2020). Three steps to flatten the mental health need curve amid the COVID-19 pandemic. *Depression and Anxiety*, 37(5), 405–406. <https://doi.org/10.1002/da.23031>
- Maslach, C. (1976). Burned-out. *Human Behavior*, 5, 16–22.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99–113. <https://doi.org/10.1002/job.4030020205>
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103–111. <https://doi.org/10.1002/wps.20311>
- McVicar, A. (2003). Workplace stress in nursing: A literature review. *Journal of Advanced Nursing*, 44(6), 633–642. <https://doi.org/10.1046/j.0309-2402.2003.02853.x>

- Miotto, K., Sanford, J., Brymer, M. J., Bursch, B., & Pynoos, R. S. (2020). Implementing an emotional support and mental health response plan for healthcare workers during the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy*, *12*(S1). <https://doi.org/10.1037/tra0000918>
- Miyasaki, J. M., Rheame, C., Gulya, L., Ellenstein, A., Schwarz, H., Vidic, T., Shanafelt, T., Cascino, T., Keran, C., & Busis, N. (2018). Author response: Qualitative study of burnout, career satisfaction, and well-being among US neurologists in 2016. *Neurology*, *90*(19). <https://doi.org/10.1212/wnl.0000000000005487>
- Mosteo, L., Chekanov, A., & Rovira de Osso, J. (2021). Executive coaching: An exploration of the coachee's perceived value. *Leadership & Organization Development Journal*, *42*(8), 1241–1253. <https://doi.org/10.1108/loj-02-2021-0046>
- Moreno, C., Wykes, T., Galderisi, S., Nordentoft, M., Crossley, N., Jones, N., Cannon, M., Correll, C. U., Byrne, L., Carr, S., Chen, E. Y., Gorwood, P., Johnson, S., Kärkkäinen, H., Krystal, J. H., Lee, J., Lieberman, J., López-Jaramillo, C., Männikkö, M., ... Arango, C. (2020). How mental health care should change as a consequence of the COVID-19 pandemic. *The Lancet Psychiatry*, *7*(9), 813–824. [https://doi.org/10.1016/s2215-0366\(20\)30307-2](https://doi.org/10.1016/s2215-0366(20)30307-2)
- Morens, D. M., Folkers, G. K., & Fauci, A. S. (2009). What is a pandemic? *The Journal of Infectious Diseases*, *200*(7), 1018–1021. <https://doi.org/10.1086/644537>
- Morrell, K. M., Loan-Clarke, J., & Wilkinson, A. J. (2004). Organisational change and employee turnover. *Personnel Review*, *33*(2), 161–173. <https://doi.org/10.1108/00483480410518022>

- Mottaz, C. J. (1985). The relative importance of intrinsic and extrinsic rewards as determinants of work satisfaction. *The Sociological Quarterly*, 26(3), 365–385.  
<https://doi.org/10.1111/j.1533-8525.1985.tb00233.x>
- Moutier, C. (2021). Suicide prevention in the COVID-19 ERA. *JAMA Psychiatry*, 78(4), 433.  
<https://doi.org/10.1001/jamapsychiatry.2020.3746>
- Muller, A. E., Hafstad, E. V., Himmels, J. P., Smedslund, G., Flottorp, S., Stensland, S. Ø., Stroobants, S., Van de Velde, S., & Vist, G. E. (2020). The mental health impact of the COVID-19 pandemic on healthcare workers, and interventions to HELP THEM: A rapid systematic review. *Psychiatry Research*, 293, 113441.  
<https://doi.org/10.1016/j.psychres.2020.113441>
- Nashwan, A. J., Abujaber, A. A., Villar, R. C., Nazarene, A., Al-Jabry, M. M., & Fradelos, E. C. (2021). Comparing the impact of covid-19 on nurses' turnover intentions before and during the pandemic in Qatar. *Journal of Personalized Medicine*, 11(6), 456.  
<https://doi.org/10.3390/jpm11060456>
- Nemteanu, M.-S., Dinu, V., & Dabija, D.-C. (2021). Job insecurity, job instability, and job satisfaction in the context of the COVID-19 pandemic. *Journal of Competitiveness*, 13(2), 65–82. <https://doi.org/10.7441/joc.2021.02.04>
- Nesher Shoshan, H., & Sonnentag, S. (2019). The effects of employee burnout on customers: An experimental approach. *Work & Stress*, 34(2), 127–147.  
<https://doi.org/10.1080/02678373.2019.1577312>

- Ng, Q. X., De Deyn, M. L., Lim, D. Y., Chan, H. W., & Yeo, W. S. (2020). The wounded healer: A narrative review of the mental health effects of the COVID-19 pandemic on Healthcare Workers. *Asian Journal of Psychiatry*, 54, 102258.  
<https://doi.org/10.1016/j.ajp.2020.102258>
- O'Brien, R. G., & Kaiser, M. K. (1985). Manova method for analyzing repeated measures designs: An extensive primer. *Psychological Bulletin*, 97(2), 316–333.  
<https://doi.org/10.1037/0033-2909.97.2.316>
- Ogresta, J., Rusac, S., & Zorec, L. (2008). Relation between burnout syndrome and job satisfaction among mental health workers. *Croatian Medical Journal*, 49(3), 364–374.  
<https://doi.org/10.3325/cmj.2008.3.364>
- Osbourne, J., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research, and Evaluation*, 8(2), 1–5.  
<https://doi.org/10.7275/r222-hv23>
- Panchal, N., Kamal, R., Cox, C., & Garfield, R. (2020, April 21). *The implications of COVID-19 for mental health and substance use*. Kaiser Family Foundation.  
<https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>
- Papathanasiou, I., Fradelos, E., Kleisiaris, C., Tsaras, K., Kalota, M., & Kourkouta, L. (2014). Motivation, leadership, empowerment and confidence: Their relation with nurses' burnout. *Materia Socio Medica*, 26(6), 405. <https://doi.org/10.5455/msm.2014.26.405-410>
- Pfefferbaum, B., & North, C. S. (2020). Mental health and the COVID-19 pandemic. *New England Journal of Medicine*, 383(6), 510–512. <https://doi.org/10.1056/nejmp2008017>

- Portoghese, I., Galletta, M., Coppola, R. C., Finco, G., & Campagna, M. (2014). Burnout and workload among health care workers: The moderating role of job control. *Safety and Health at Work*, 5(3), 152–157. <https://doi.org/10.1016/j.shaw.2014.05.004>
- Pousa, C., & Mathieu, A. (2014). The influence of coaching on employee performance: Results from two international quantitative studies. *Performance Improvement Quarterly*, 27(3), 75–92. <https://doi.org/10.1002/piq.21175>
- Prasetya, A., Khairunnisa, H., & Aziz, A. L. (2021). The effect of work stress and burnout on job satisfaction and employee performance: A test of conservation of resources theory. *Advances in Economics, Business and Management Research*, 191, 74–79. <https://doi.org/10.2991/aebmr.k.210928.016>
- Prayogo, A., Diza, T., Prasetyaningtyas, S. W., & Maharani, A. (2020). A qualitative study exploring the effects of job analysis and organizational culture toward job satisfaction in a coffee shop. *Open Journal of Business and Management*, 08(06), 2687–2695. <https://doi.org/10.4236/ojbm.2020.86166>
- Rajkumar, R. P. (2020). Covid-19 and mental health: A review of the existing literature. *Asian Journal of Psychiatry*, 52, 102066. <https://doi.org/10.1016/j.ajp.2020.102066>
- Rapisarda, F., Vallarino, M., Cavallini, E., Barbato, A., Brousseau-Paradis, C., De Benedictis, L., & Lesage, A. (2020). The early impact of the COVID-19 emergency on Mental Health Workers: A Survey in Lombardy, Italy. *International Journal of Environmental Research and Public Health*, 17(22), 8615. <https://doi.org/10.3390/ijerph17228615>

- Rasool, S. F., Wang, M., Zhang, Y., & Samma, M. (2020). Sustainable work performance: The roles of workplace violence and occupational stress. *International Journal of Environmental Research and Public Health*, 17(3), 912.  
<https://doi.org/10.3390/ijerph17030912>
- Ravari, A., Bazargan-Hejazi, S., Ebadi, A., Mirzaei, T., & Oshvandi, K. (2012). Work values and job satisfaction: A qualitative study of Iranian nurses. *Nursing Ethics*, 20(4), 448–458.  
<https://doi.org/10.1177/0969733012458606>
- Rekalde, I., Landeta, J., Albizu, E., & Fernandez-Ferrin, P. (2017). Is executive coaching more effective than other management training and development methods? *Management Decision*, 55(10), 2149–2162. <https://doi.org/10.1108/md-10-2016-0688>
- Roodt, G. (2004). *Turnover intention scale (TIS)* [Unpublished manuscript]. University of Johannesburg.
- Rössler, W. (2012). Stress, Burnout, and job dissatisfaction in mental health workers. *European Archives of Psychiatry and Clinical Neuroscience*, 262(S2), 65–69.  
<https://doi.org/10.1007/s00406-012-0353-4>
- Said, R. M., & El-Shafei, D. A. (2020). Occupational stress, job satisfaction, and intent to leave: Nurses working on front lines during COVID-19 pandemic in Zagazig City, Egypt. *Environmental Science and Pollution Research*, 28(7), 8791–8801.  
<https://doi.org/10.1007/s11356-020-11235-8>
- Scanlan, J. N., & Still, M. (2019). Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service. *BMC Health Services Research*, 19(1), 1–11.  
<https://doi.org/10.1186/s12913-018-3841-z>

- Schützenmeister, A., Jensen, U., & Piepho, H.-P. (2012). Checking normality and homoscedasticity in the general linear model using diagnostic plots. *Communications in Statistics - Simulation and Computation*, 41(2), 141–154.  
<https://doi.org/10.1080/03610918.2011.582560>
- Sharma, M., Lioutas, V.-A., Madsen, T., Clark, J., O’Sullivan, J., Elkind, M. S., Willey, J. Z., Marshall, R. S., Selim, M. H., Greer, D., Tirschwell, D. L., Burton, T., Boehme, A., & Aparicio, H. J. (2020). Decline in stroke alerts and hospitalisations during the covid-19 pandemic. *Stroke and Vascular Neurology*, 5(4), 524–524. <https://doi.org/10.1136/svn-2020-000441>
- Sher, L. (2020). The impact of the covid-19 pandemic on suicide rates. *QJM: An International Journal of Medicine*, 113(10), 707–712. <https://doi.org/10.1093/qjmed/hcaa202>
- Sheraton, M., Deo, N., Dutt, T., Surani, S., Hall-Flavin, D., & Kashyap, R. (2020). Psychological effects of the covid 19 pandemic on healthcare workers globally: A systematic review. *Psychiatry Research*, 292, 113360. <https://doi.org/10.1016/j.psychres.2020.113360>
- Shigemura, J., Ursano, R. J., Morganstein, J. C., Kurosawa, M., & Benedek, D. M. (2020). Public responses to the novel 2019 coronavirus (2019-ncov) in Japan: Mental health consequences and target populations. *Psychiatry and Clinical Neurosciences*, 74(4), 281–282. <https://doi.org/10.1111/pcn.12988>
- Shoja, E., Aghamohammadi, V., Bazayr, H., Moghaddam, H. R., Nasiri, K., Dashti, M., Choupani, A., Garaee, M., Aliasgharzadeh, S., & Asgari, A. (2020). Covid-19 effects on the workload of Iranian Healthcare Workers. *BMC Public Health*, 20(1).  
<https://doi.org/10.1186/s12889-020-09743-w>



- Simonetti, J. A., Clinton, W. L., Taylor, L., Mori, A., Fihn, S. D., Helfrich, C. D., & Nelson, K. (2020). The impact of survey nonresponse on estimates of healthcare employee burnout. *Healthcare*, 8(3), 100451. <https://doi.org/10.1016/j.hjdsi.2020.100451>
- Simon, L. S., Judge, T. A., & Halvorsen-Ganepola, M. D. K. (2010). In good company? A multi-study, multi-level investigation of the effects of coworker relationships on employee well-being. *Journal of Vocational Behavior*, 76(3), 534–546. <https://doi.org/10.1016/j.jvb.2010.01.006>
- Singh, D. (2019). A literature review on employee retention with focus on recent trends. *International Journal of Scientific Research in Science, Engineering and Technology*, 425–431. <https://doi.org/10.32628/ijrst195463>
- Sijbom, R. B., Lang, J. W., & Anseel, F. (2018). Leaders' achievement goals predict employee burnout above and beyond employees' own achievement goals. *Journal of Personality*, 87(3), 702–714. <https://doi.org/10.1111/jopy.12427>
- Sofology, M., Efstratopoulou, M., & Dunn, T. (2018). Predicting Burnout Syndrome in Greek mental health professionals. *Journal of Social Service Research*, 45(1), 142–149. <https://doi.org/10.1080/01488376.2018.1480556>
- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology*, 13(6), 693–713. <https://doi.org/10.1007/bf00929796>
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes and consequences*. Sage.
- Sproul, R.C. (2000). *The consequences of ideas: Understanding the concepts shaped our world* (redesign). Crossway.

- Taylor, C. B., Fitzsimmons-Craft, E. E., & Graham, A. K. (2020). Digital technology can revolutionize mental health services delivery: The COVID -19 crisis as a catalyst for change. *International Journal of Eating Disorders*, *53*(7), 1155–1157.  
<https://doi.org/10.1002/eat.23300>
- Thome, J., Coogan, A. N., Fischer, M., Tucha, O., & Faltraco, F. (2020). Challenges for mental health services during the 2020 COVID -19 outbreak in Germany. *Psychiatry and Clinical Neurosciences*, *74*(7), 407–407. <https://doi.org/10.1111/pcn.13019>
- Tomlin, J., Dalglish-Warburton, B., & Lamph, G. (2020). Psychosocial support for healthcare workers during the COVID-19 pandemic. *Frontiers in Psychology*, *11*.  
<https://doi.org/10.3389/fpsyg.2020.01960>
- Kaiser (2021). *Total health care employment*. KFF. <https://www.kff.org/other/state-indicator/total-health-care-employment/?currentTimeframe=0&sortModel=%7B%22colId%22%3A%22Total+Health+Care+Employment%22%2C%22sort%22%3A%22desc%22%7D> Retrieved March 16, 2022
- Tran, K., Nguyen, P., Dang, T., & Ton, T. (2018). The impacts of the high-quality workplace relationships on job performance: A perspective on staff nurses in Vietnam. *Behavioral Sciences*, *8*(12), 109. <https://doi.org/10.3390/bs8120109>
- Trépanier, S. G., Vallerand, R. J., Ménard, J., & Peterson, C. (2020). Job Resources and burnout: Work motivation as a moderator. *Stress and Health*, *36*(4), 433–441.  
<https://doi.org/10.1002/smi.2939>

- Tsai, J., & Wilson, M. (2020). Covid-19: A potential public health problem for homeless populations. *The Lancet Public Health*, 5(4). [https://doi.org/10.1016/s2468-2667\(20\)30053-0](https://doi.org/10.1016/s2468-2667(20)30053-0)
- Turek, D. (2020). When does job burnout not hurt employee behaviours? *Journal of Organizational Effectiveness: People and Performance*, 8(1), 59–79. <https://doi.org/10.1108/joepp-04-2020-0055>
- Uyanık, G. K., & Güler, N. (2013). A study on multiple linear regression analysis. *Procedia - Social and Behavioral Sciences*, 106, 234–240. <https://doi.org/10.1016/j.sbspro.2013.12.027>
- Vasquez, D. (2014). Employee retention for economic stabilization: A qualitative phenomenological study in the hospitality sector. *International Journal of Management, Economics and Social Sciences*, 3(1), 1–17.
- Velavan, T. P., & Meyer, C. G. (2020). The Covid-19 epidemic. *Tropical Medicine & International Health*, 25(3), 278–280. <https://doi.org/10.1111/tmi.13383>
- Vindrola-Padros, C., Andrews, L., Dowrick, A., Djellouli, N., Fillmore, H., Bautista Gonzalez, E., Javadi, D., Lewis-Jackson, S., Manby, L., Mitchinson, L., Mulcahy Symmons, S., Martin, S., Regenold, N., Robinson, H., Sumray, K., Singleton, G., Syversen, A., Vanderslott, S., & Johnson, G. (2020). Perceptions and experiences of healthcare workers during the COVID-19 pandemic in the UK. *BMJ Open*, 10(11). <https://doi.org/10.1136/bmjopen-2020-040503>
- Virgă, D., Schaufeli, W. B., Taris, T. W., van Beek, I., & Sulea, C. (2019). Attachment styles and employee performance: The mediating role of burnout. *The Journal of Psychology*, 153(4), 383–401. <https://doi.org/10.1080/00223980.2018.1542375>

- Vu, F. (2013). *Central Limit Theorem*. Department of Mathematics for The University of Chicago. <https://math.uchicago.edu/~may/REU2013/REUPapers/Vu.pdf>
- Vullingsh, J. T., De Hoogh, A. H., Den Hartog, D. N., & Boon, C. (2018). Ethical and passive leadership and their joint relationships with burnout via role clarity and role overload. *Journal of Business Ethics*, 165(4), 719–733. <https://doi.org/10.1007/s10551-018-4084-y>
- Wang, H., Liu, Y., Hu, K., Zhang, M., Du, M., Huang, H., & Yue, X. (2020). Healthcare Workers' stress when caring for COVID-19 patients: An altruistic perspective. *Nursing Ethics*, 27(7), 1490–1500. <https://doi.org/10.1177/0969733020934146>
- Wang, Y., Shi, L., Que, J., Lu, Q., Liu, L., Lu, Z., Xu, Y., Liu, J., Sun, Y., Meng, S., Yuan, K., Ran, M., Lu, L., Bao, Y., & Shi, J. (2021). The impact of quarantine on mental health status among general population in China during the COVID-19 pandemic. *Molecular Psychiatry*, 26(9), 4813–4822. <https://doi.org/10.1038/s41380-021-01019-y>
- Wee, Kuk-hoan, Bang, Won-seok, & Park, Ju-young. (2020). A study on effect relationships of coaching leadership job satisfaction, organizational commitment, turnover intention. *International Journal of Social Welfare Promotion and Management*, 7(1), 1–8. <https://doi.org/10.21742/ijswpm.2020.7.1.01>
- Wernimont, P. F. (1966). Intrinsic and extrinsic factors in job satisfaction. *Journal of Applied Psychology*, 50(1), 41–50. <https://doi.org/10.1037/h0022938>
- Willard-Grace, R., Knox, M., Huang, B., Hammer, H., Kivlahan, C., & Grumbach, K. (2019). Burnout and health care workforce turnover. *The Annals of Family Medicine*, 17(1), 36–41. <https://doi.org/10.1370/afm.2338>
- Wolters, A. M. (2005). *Creation regained* (2nd ed.). William B. Eerdmans Publishing.

- Woods, J. A., Hutchinson, N. T., Powers, S. K., Roberts, W. O., Gomez-Cabrera, M. C., Radak, Z., Berkes, I., Boros, A., Boldogh, I., Leeuwenburgh, C., Coelho-Júnior, H. J., Marzetti, E., Cheng, Y., Liu, J., Durstine, J. L., Sun, J., & Ji, L. L. (2020). The COVID-19 pandemic and physical activity. *Sports Medicine and Health Science*, 2(2), 55–64.  
<https://doi.org/10.1016/j.smhs.2020.05.006>
- World Health Organization. (year) *Who coronavirus (COVID-19) dashboard*. World Health Organization. <https://covid19.who.int/>
- Xiao, C. (2020). A novel approach of consultation on 2019 novel coronavirus (covid-19)-related psychological and mental problems: Structured letter therapy. *Psychiatry Investigation*, 17(2), 175–176. <https://doi.org/10.30773/pi.2020.0047>
- Yang, M., & Fry, L. W. (2018). The role of spiritual leadership in Reducing Healthcare Worker burnout. *Journal of Management, Spirituality & Religion*, 15(4), 305–324.  
<https://doi.org/10.1080/14766086.2018.1482562>
- Yang, Y., Li, W., Zhang, Q., Zhang, L., Cheung, T., & Xiang, Y.-T. (2020). Mental health services for older adults in China during the COVID-19 Outbreak. *The Lancet Psychiatry*, 7(4). [https://doi.org/10.1016/s2215-0366\(20\)30079-1](https://doi.org/10.1016/s2215-0366(20)30079-1)
- Yu, X., Zhao, Y., Li, Y., Hu, C., Xu, H., Zhao, X., & Huang, J. (2020). Factors associated with job satisfaction of frontline medical staff fighting against COVID-19: A cross-sectional study in China. *Frontiers in Public Health*, 8. <https://doi.org/10.3389/fpubh.2020.00426>
- Yuryna-Connolly, L., Lang, M., Gathegi, J., & Tygar, D. J. (2017). Organisational culture, procedural countermeasures, and employee security behaviour. *Information & Computer Security*, 25(2), 118–136. <https://doi.org/10.1108/ics-03-2017-0013>

- Zandifar, A., & Badrfam, R. (2020). Iranian mental health during the COVID-19 epidemic. *Asian Journal of Psychiatry*, 51, 101990. <https://doi.org/10.1016/j.ajp.2020.101990>
- Zhai, Y., & Du, X. (2020). Mental health care for international Chinese students affected by the COVID-19 outbreak. *The Lancet Psychiatry*, 7(4). [https://doi.org/10.1016/s2215-0366\(20\)30089-4](https://doi.org/10.1016/s2215-0366(20)30089-4)
- Zhao, Y., An, Y., Tan, X., & Li, X. (2020). Mental health and its influencing factors among self-isolating ordinary citizens during the beginning epidemic of covid-19. *Journal of Loss and Trauma*, 25(6-7), 580–593. <https://doi.org/10.1080/15325024.2020.1761592>
- Zhu, Y., Chen, L., Ji, H., Xi, M., Fang, Y., & Li, Y. (2020). The risk and prevention of novel coronavirus pneumonia infections among inpatients in psychiatric hospitals. *Neuroscience Bulletin*, 36(3), 299–302. <https://doi.org/10.1007/s12264-020-00476-9>

## APPENDIX A: Invitation Letters and Site Permissions

**Research Study Invitation Letter**

Hi, my name is Colton Jacobs, and I am a doctoral candidate at the Liberty University School of Behavioral Sciences. I'd like your permission to include *A Caring Alternative, LLC* as part of a research study on the effects of the COVID-19 pandemic on mental health employees.

The purpose of this study is to investigate how the COVID-19 pandemic has specifically affected job satisfaction, burnout syndrome, and intent to leave in mental health workers in Western North Carolina. I am interested in your employee's participation within this research study due to their continued work with mental health clients before the COVID-19 pandemic and the 3 years following the COVID-19 pandemic. I would like to collect data, with the assistance of your human resources department, using an anonymous online survey sent using the company email system. All surveys are completed through a third-party host, JotForm.

This data will allow me to provide a baseline of job satisfaction, burnout syndrome, and intent to leave for mental health workers before the COVID-19 pandemic began. It will also allow me to examine how the job satisfaction, burnout, and intent to leave potential changed during the 3 years of working through the COVID-19 pandemic. Understanding the effects brought on by the COVID-19 pandemic will help to improve our understanding on whether the COVID-19 pandemic had any effect at all on the job satisfaction, burnout, and intent to leave for mental health workers.

Completing this research will have minimal risks to you, your agency, and your employees as participants. By participating you and members of your agency may benefit through a more complete understanding of how the COVID-19 pandemic has affected your employee's job satisfaction, burnout, and intent to leave the mental health field.

I have included a copy of the informed consent page on this request email, which I encourage you to read thoroughly before agreeing to participate in the study. If you agree for *A Caring Alternative, LLC* to participate in this study, please print the second page of this document and sign with your credentials and position. Please feel free to contact me via e-mail at [REDACTED] should you have any questions. Thank you in advance for your participation!

Colton Jacobs  
Doctoral Candidate, Liberty University  
School of Behavioral Sciences  
[REDACTED]

## CONSENT FORM

COVID-19: Effects on Job Satisfaction, Employee Burnout, and Intent to Leave in Mental Health Workers in Western North Carolina.

Colton Jacobs  
Liberty University  
School of Behavioral Sciences

You are invited to be in a research study to investigate how the COVID-19 pandemic has affected job satisfaction, burnout syndrome, and intent to leave in mental health workers in Western North Carolina. You were selected as a possible participant because you are a mental health worker in Western North Carolina who is over the age of 18, worked in mental health prior to the COVID-19 pandemic and have continued to work in mental health, and are employed as one of the following: a licensed clinician, counselor, practitioner, peer support, direct care professional (qualified professional, associate professional, or paraprofessional), or an administration employee. Please read this form and ask any questions you may have before agreeing to be in the study.

Colton Jacobs, a doctoral candidate in the School of Behavioral Sciences at Liberty University, is conducting this study.

**Background Information:** The purpose of this study to investigate the 3-year influence of the COVID-19 pandemic on job satisfaction, burnout syndrome, and intent to leave of mental health workers. The population for this study is mental health workers in Western North Carolina. The results of this study may be used to increase retention of mental health workers thereby providing more consistent and effective mental health services.

**Procedures:** If you agree to be in this study, I would ask you to do the following things:

1. Complete the online survey through JotForm initially, as you would be answering the questions prior to the COVID-19 pandemic. Answer each question to the best of your knowledge.
2. Complete the online survey through JotForm a second time, as you would be answering the questions as you currently feel during the COVID-19 pandemic. Answer each question to the best of your knowledge.

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**Benefits:** Participants should not expect to receive a direct benefit from taking part in this study. Benefits to society include the results of this study may be used to increase retention of mental health workers thereby providing more consistent and effective mental health services.

**Compensation:** Participants will not be compensated for participating in this study.



**Confidentiality:** The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. Participants will be anonymous in this study. All completed surveys will be anonymous with no personal information asked or recorded. Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

**Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or your place of employment. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

**How to Withdraw from the Study:** If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

**Contacts and Questions:** The researcher conducting this study is Colton Jacobs. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [REDACTED]. You may also contact the researcher's faculty chair, Dr. Kate Andrews, at [REDACTED].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at [irb@liberty.edu](mailto:irb@liberty.edu).

*Please notify the researcher if you would like a copy of this information for your records.*

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

---

Signature of Participant

Date

---

Signature of Investigator

Date

## APPENDIX C: Turnover Intention Scale-6 Survey (Roodt, 2004)

**TURNOVER INTENTION SCALE (TIS) - 6**

Copyright © 2004, G. Roodt

The following section aims to ascertain the extent to which you intend to stay at the organization.

Please read each question and indicate your response using the scale provided for each question:

**DURING THE PAST 9 MONTHS.....**

1	How often have you considered leaving your job?	<b>Never</b>	1-----2-----3-----4-----5	<b>Always</b>
2	How satisfying is your job in fulfilling your personal needs?	<b>Very Satisfying</b>	1-----2-----3-----4-----5	<b>Totally Dissatisfying</b>
3	How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?	<b>Never</b>	1-----2-----3-----4-----5	<b>Always</b>
4	How often do you dream about getting another job that will better suit your personal needs?	<b>Never</b>	1-----2-----3-----4-----5	<b>Always</b>
5	How likely are you to accept another job at the same compensation level should it be offered to you?	<b>Highly Unlikely</b>	1-----2-----3-----4-----5	<b>Highly Likely</b>
6	How often do you look forward to another day at work?	<b>Always</b>	1-----2-----3-----4-----5	<b>Never</b>

## APPENDIX D: Permission to use Turnover Intention Scale-6

[External] RE: Access and Permission to use TIS-6



1 attachments (59 KB)

Turnover intentions questionnaire - v4.doc

You don't often get email from roodtgs@gmail.com. [Learn why this is important](#)

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[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

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Dear Colton

You are welcome to use the TIS for your research (please accept this e-mail as the formal permission letter). For this purpose please find the TIS-15 attached for your convenience. The TIS-6 (version 4) consists of the first six items high-lighted in yellow. You may use any one of these two versions. The TIS is based on the Theory of Planned Behaviour.

The only two conditions for using the TIS are that it may not be used for commercial purposes (other than for post graduate research) and second that it should be properly referenced as (Roodt, 2004) as in the article by Bothma & Roodt (2013) in the SA Journal of Human Resource Management (open access).

It is easy to score the TIS-6. Merely add the item scores to get a total score. The midpoint of the scale is 18 (3 x 6). If the total score is below 18 then it indicates a desire to stay. If the scores are above 18 it indicates a desire to leave the organisation. The minimum a person can get is 6 (6 x 1) and the maximum is 30 (5 x 6). No item scores need to be reflected (reverse scored) for the TIS-6.

It is recommended that you conduct a CFA on the item scores to assess the dimensionality of the scale. We found that respondents with a matric (grade 12) tertiary school qualification tend to understand the items better and consequently a uni-dimensional factor structure is obtained.

If you wish to translate the TIS in a local language, you are welcome to do so. It is recommended that a language expert is used in the translate - back translate method. I wish you all the best with your research!

Best regards

## APPENDIX E: Job Satisfaction Survey (Spector, 1994)

<b>JOB SATISFACTION SURVEY</b> Paul E. Spector Department of Psychology University of South Florida Copyright Paul E. Spector 1994, All rights reserved.		
PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.		Disagree very much Disagree moderately Disagree slightly Agree slightly Agree moderately Agree very much
1	I feel I am being paid a fair amount for the work I do.	1 2 3 4 5 6
2	There is really too little chance for promotion on my job.	1 2 3 4 5 6
3	My supervisor is quite competent in doing his/her job.	1 2 3 4 5 6
4	I am not satisfied with the benefits I receive.	1 2 3 4 5 6
5	When I do a good job, I receive the recognition for it that I should receive.	1 2 3 4 5 6
6	Many of our rules and procedures make doing a good job difficult.	1 2 3 4 5 6
7	I like the people I work with.	1 2 3 4 5 6
8	I sometimes feel my job is meaningless.	1 2 3 4 5 6
9	Communications seem good within this organization.	1 2 3 4 5 6
10	Raises are too few and far between.	1 2 3 4 5 6
11	Those who do well on the job stand a fair chance of being promoted.	1 2 3 4 5 6
12	My supervisor is unfair to me.	1 2 3 4 5 6
13	The benefits we receive are as good as most other organizations offer.	1 2 3 4 5 6
14	I do not feel that the work I do is appreciated.	1 2 3 4 5 6
15	My efforts to do a good job are seldom blocked by red tape.	1 2 3 4 5 6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1 2 3 4 5 6
17	I like doing the things I do at work.	1 2 3 4 5 6
18	The goals of this organization are not clear to me.	1 2 3 4 5 6

PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT. Copyright Paul E. Spector 1994, All rights reserved.		Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
19	I feel unappreciated by the organization when I think about what they pay me.	1	2	3	4	5	6
20	People get ahead as fast here as they do in other places.	1	2	3	4	5	6
21	My supervisor shows too little interest in the feelings of subordinates.	1	2	3	4	5	6
22	The benefit package we have is equitable.	1	2	3	4	5	6
23	There are few rewards for those who work here.	1	2	3	4	5	6
24	I have too much to do at work.	1	2	3	4	5	6
25	I enjoy my coworkers.	1	2	3	4	5	6
26	I often feel that I do not know what is going on with the organization.	1	2	3	4	5	6
27	I feel a sense of pride in doing my job.	1	2	3	4	5	6
28	I feel satisfied with my chances for salary increases.	1	2	3	4	5	6
29	There are benefits we do not have which we should have.	1	2	3	4	5	6
30	I like my supervisor.	1	2	3	4	5	6
31	I have too much paperwork.	1	2	3	4	5	6
32	I don't feel my efforts are rewarded the way they should be.	1	2	3	4	5	6
33	I am satisfied with my chances for promotion.	1	2	3	4	5	6
34	There is too much bickering and fighting at work.	1	2	3	4	5	6
35	My job is enjoyable.	1	2	3	4	5	6
36	Work assignments are not fully explained.	1	2	3	4	5	6

## APPENDIX F: Permission to Use Job Satisfaction Survey

HOME ABOUT ASSESSMENTS ▾ BLOG ▾ BOOKS ▾ MEDIA ▾ CONTACT ME

Home Assessments ▸ Our Assessments ▸ Conditions for Using These Assessments

### Conditions for Using These Assessments

All of the assessments in the Our Assessments section of [paulspecter.com](http://paulspecter.com) are copyrighted.

You have my permission for free noncommercial research/teaching use of any of the assessments that are in the Our Assessments section of [paulspecter.com](http://paulspecter.com). This includes student theses and dissertations, as well as other student research projects. Copies of the scale can be reproduced in a thesis or dissertation as long as the copyright notice is included, as shown in the downloadable copy of each scale.

For commercial uses there is a fee for using these scales. A commercial use means you are charging someone a fee to provide a service that includes use of one or more of these scales. Contact me at [paul@paulspecter.com](mailto:paul@paulspecter.com) to discuss fees for commercial use.

## APPENDIX G: Oldenburg Burnout Inventory (Demerouti et al., 2003)

<b><u>Oldenburg Burnout Inventory</u></b>					
<i>Demerouti et al., 2003</i>					
<b>Instructions:</b> Below you find a series of statements with which you may agree or disagree. Using the scale, please indicate the degree of your agreement by selecting the number that corresponds with each statement.					
		<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
1	I always find new and interesting aspects in my work (D)	1	2	3	4
2	There are days when I feel tired before I arrive at work (E.R.)	1	2	3	4
3	It happens more and more often that I talk about my work in a negative way (D.R)	1	2	3	4
4	After work, I tend to need more time than in the past in order to relax and feel better (E.R)	1	2	3	4
5	I can tolerate the pressure of my work very well (E)	1	2	3	4
6	Lately, I tend to think less at work and do my job almost mechanically (D.R)	1	2	3	4
7	I find my work to be a positive challenge (D)	1	2	3	4
8	During my work, I often feel emotionally drained (E.R.)	1	2	3	4
9	Over time, one can become disconnected from this type of work (D.R)	1	2	3	4
10	After working, I have enough energy for my leisure activities (E)	1	2	3	4
11	Sometimes I feel sickened by my work tasks (D.R)	1	2	3	4
12	After my work, I usually feel worn out and weary (E.R)	1	2	3	4
13	This is the only type of work that I can imagine myself doing (D)	1	2	3	4
14	Usually, I can manage the amount of my work well (E)	1	2	3	4

15	I feel more and more engaged in my work (D)	1	2	3	4
16	When I work, I usually feel energized (E)	1	2	3	4
<b>Note:</b> Disengagement items are 1, 3(R), 6(R), 7, 9(R), 11(R), 13, 15. Exhaustion items are 2(R), 4(R), 5, 8(R), 10, 12(R), 14, 16. (R) means reversed item when the scores should be such that higher scores indicate more burnout.					
<b>Disengagement Subtotal:</b>		<b>Exhaustion Subtotal:</b>		<b>Full Scale Total:</b>	
<b>Oldenburg Burnout Inventory Scoring</b>					
1) “Reverse” scores on items 2, 3, 4, 6, 8, 9, 11, 12. This means if you scored a 1, make it a 4.					
4. If you scored a 3, make it a 2, etc.					
2) Add together scores on all 16 items, including those “reversed” as above.					
3) Your total score should be between 16-64.					




## APPENDIX H: Permission to use Oldenburg Burnout Inventory


### Questionnaires

Together with his colleagues, Arnold Bakker has developed several questionnaires for the assessment of job demands and resources, employee well-being, and proactive employee behaviors. These questionnaires can be used for free in scientific research. Those who want to use the questionnaires commercially, need to contact Dr. Bakker. All questionnaires are available in English, and many questionnaires are also available in other languages. For example, the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003) is available in more than 40 languages. You can find the questionnaires below.

APPENDIX I: Permission to survey employees of A Caring Alternative, LLC

**Research Study Invitation Letter – Signature Page**

I, , agree and provide consent for the participation of *A Caring Alternative, LLC* in this study. By consenting, I agree that all employee who meet the requirements of the study can participate in the anonymous online survey. I also agree that I have carefully read, and agree to, the informed consent provided for this research study.

Consenting Signature:  \_\_\_\_\_

Consenting Signature Title:  \_\_\_\_\_

Agency: A Caring Alternative, LLC