Walden University

ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2022

Factors Influencing Burnout Rates Among Mental Health Professionals

Vanessa Ann Smith
Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Part of the Clinical Psychology Commons

Walden University

College of Allied Health

This is to certify that the doctoral dissertation by

Vanessa Ann Smith

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

Review Committee
Dr. Reba Glidewell, Committee Chairperson, Psychology Faculty
Dr. Megan Corley, Committee Member, Psychology Faculty
Dr. Michael Johnson, University Reviewer, Psychology Faculty

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

Walden University
2022

Abstract

Factors Influencing Burnout Rates Among Mental Health Professionals

by

Vanessa Ann Smith

MEd, Grand Canyon University, 2016

MS, University of Phoenix, 2012

BS, University of Phoenix, 2011

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

August 2022

Abstract

The responsibility of mental health providers to care for the sick and their families throughout the COVID-19 pandemic placed mental health providers at a considerably higher risk for burnout than the general population. Despite the increasing burnout rates among mental health providers during the pandemic, no scholars have yet examined how the COVID-19 pandemic affected burnout among mental health providers. Therefore, the purpose of this quantitative, correlational survey study was to examine the factors that contributed to burnout among psychologists during the COVID-19 pandemic in the United States. Maslach's theory of burnout was used as the theoretical framework to explore whether factors specific to the pandemic, as measured by the Pandemic Experiences and Perceptions Survey (PEPS), influenced the experience of burnout, as measured by the Maslach Burnout Inventory—Health Services Survey (MBI-HSS), among clinical psychologists practicing during the COVID-19 pandemic. To answer this research question, 137 psychologists completed the MBI-HSS and the PEPS. Participants were screened and recruited through the online platform SurveyMonkey, which is also the platform where data were collected. The results revealed the variables of disruption, risk perception, and impact on work life areas significantly predicted the burnout scores. The findings may create positive social change for clinicians in dealing with future pandemics.

Factors Influencing Burnout Rates Among Mental Health Professionals

by

Vanessa Ann Smith

MEd, Grand Canyon University, 2016

MS, University of Phoenix, 2012

BS, University of Phoenix, 2011

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

August 2022

Dedication

This dissertation is dedicated to the many people who helped me and supported me throughout this journey. First and foremost, to God, for without him nothing is possible. Secondly, my children, Mia and Nehemiah, whom I took time away from to achieve this lifelong dream and goal in hopes of paving a path and setting a standard for you. Mia and Nehemiah, thank you for your love, understanding, support, hugs, and kisses when I had to be away from you or couldn't do things with you. Richard, my best friend forever, thank you for believing in all my dreams and wishes throughout the years we shared. Thank you for your support from my first degree to my last—I couldn't have ever done it without all your unconditional love, patience, support, and constant cheering on. Lastly, to all who didn't believe, I dedicate this to you, because anything is possible when you set your mind and heart to it. To my brothers, never settle … to my parents, thank you for giving me life and lessons I didn't want but would shape me to who I am today. To my mother for your help with my children throughout this journey when I had to be away. To my nieces, Lia and Savannah, never give up and always push for higher ground. To my nephews, Dante, Levi, and Azazel, strive for the best and never settle for less. To my grandmother Luz in heaven, thank you for all your love and strength; even though you left me, you always have been with me.

Acknowledgments

First of all, I would like to express my sincere gratitude to my chair, Dr. Reba Glidewell, and committee member, Dr. Megan Gramm, for guiding me along the way. Thank you for believing in me every step of the way throughout this process. I would like to also extend my sincere and heartfelt gratitude to my supervisors, Dr. Bennett, Dr. Trapschuh, and Dr. Leclerc, for all the skills, time, patience, and knowledge that you have given me throughout my journey. Dr. Trapschuh, thank you for the topic idea and support on this dissertation—you are amazing. Thank you to all the psychologists who immediately rose to the occasion to contribute to my data collection.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

The COVID-19 pandemic has disrupted the lives of people and professions all around the world. As the undisputable impact of the pandemic continues to unfold and the effect on the global society reveals itself, professionals in healthcare settings are at an increased risk of enduring adverse health outcomes specific to their well-being (Khan et al., 2020). The need for healthcare services has notably increased since the rise of COVID-19 cases, placing tremendous pressure on healthcare providers to care for the millions of patients and their families affected by the virus. Despite monumental closures and shutdowns worldwide, healthcare clinicians have provided consistent care to individuals throughout the pandemic. Mental health providers have been called upon to help an innumerable volume of family members and caregivers who have lost loved ones, provide support to families of actively sick patients, and guide individuals through the complexities and frustrations involved in navigating the healthcare system. Moreover, mental health providers have been expected to fulfill their professional obligations to patients while simultaneously enduring the same trauma of the pandemic themselves (Pearman et al., 2020). This reality has likely contributed to increased rates of burnout among mental health providers, which were unfortunately already rampant before the pandemic. Emerging evidence has shown that mental health professionals experienced burnout at rates between 21% and 61% before the pandemic (O'Connor et al., 2018); however, no scholars have yet examined the impact of the pandemic on burnout rates among mental health providers. Through the current quantitative, correlational survey study, I focused on uncovering the specific factors contributing to burnout among

psychologists in the wake of the COVID-19 pandemic. In this chapter, the problem statement, the purpose of the study, the theoretical background of the study, research questions and hypotheses, and the nature of the study are discussed. Other areas covered include the definition of terms, social change significance, assumptions and limitations, scope and delimitations, and a summary of the chapter.

Background

Similar to the experience of medical professionals facing overcrowded emergency rooms during the pandemic, mental health providers have been faced with an increasing need for mental health treatment (Rossi et al., 2020). In a study conducted in China during the heightened period of the COVID-19 outbreak, the authors found that of 1,563 hospital staff, 74% depicted stress-related symptoms, and about 50% reported depression symptoms (Kannampallil et al., 2020). This preliminary review also uncovered that roughly 44% of the participants reported anxiety-related symptoms and 36% indicated insomnia (Kannampallil et al., 2020). The results of this study indicated evidence of escalations in depression, stress, and distress among the healthcare workers in Wuhan city compared to other regions in China. In this pandemic, many governments have tried hard to contain and reduce the spread of COVID-19 by implementing policies (Cavanaugh et al., 2021). Although the government can opt to make emergency rooms more spacious to ease congestion, a similar solution is not an option for mental health providers in the physical space.

Effects of COVID-19 Pandemic on the Healthcare System

Mental health providers are known to have face-to-face, close-contact

relationships with clients, a practice that has been altered as a result of pandemic

regulations (Whaibeh et al., 2020). The social distancing requirement prohibited mental

health providers from engaging in traditional therapeutic practices and significantly

changed treatment strategies (Chatterjee et al., 2020). Further, lockdowns, social

distancing, curfews, and many other movement restrictions and everyday activities have

affected people's lives and businesses, as some have also been separated from their

families (Wright & Caudill, 2020). These problems have resulted in high rates of mental

health problems for many people. At such times, mental health providers have been in

need at various hospitals, homes, and even business places. With the daily rise of mental

health needs, existential and emotional stressors have been identified among

psychotherapists and mental health experts (Joshi & Sharma, 2020). Despite this

evidence, no empirical studies have been conducted on the impact of the COVID-19

crisis on the burnout rates of psychotherapists and mental health experts.

Burnout

Burnout has been defined as the final stage of chronic stress (Talaee et al., 2020).

According to Wright and Caudill (2020), burnout has always been related to mental

health impairment due to workplace issues; this state sometimes even correlates with

depression and anxiety. Burnout is distressing, and apart from being distressing, it may

manifest itself in various ways. Burnout may manifest as both mental and physical

health-related problems. The physical symptoms of burnout include somatization, fatigue,

and exhaustion. Social withdrawal is also linked to burnout, along with the inability to express emotions, low morale, absenteeism, and reduced performance and efficiency (Azoulay et al., 2020). Some scholars have argued that burnout is one-dimensional, exhibiting only exhaustion, and an available measure of burnout only examines this dimension specifically. Still, there are only three dimensions of burnout that are widely recognized in burnout studies such as that of Dinibutun (2020).

Researchers have shown that the work environment, caseload sizes, and severity of client symptoms heavily contribute to burnout among mental health professionals (Practice Research & Policy Staff, 2018). Coincidentally, these factors are primarily those that have worsened as a result of the pandemic. The shift to remote practices has drastically altered mental health professionals' work environment, caseload sizes have substantially increased, and the severity of client symptoms has increased across the board (J. Johnson et al., 2020). This change in professional dynamics and responsibilities during the pandemic has not yet been explored. Therefore, there is a gap in current research on understanding the specific factors that have influenced burnout rates among mental health professionals during the COVID-19 pandemic.

Burnout During the COVID-19 Pandemic

The factors contributing to burnout prior to the pandemic are relatively well understood; however, few researchers have examined the implications of the COVID-19 pandemic on burnout. The findings of some studies that have been undertaken during the COVID-19 pandemic have indicated the association between burnout and multiple problems such as sleep disorders, increased alcohol consumptions, sedentarism,

depression, obesity, and musculoskeletal pain (Dinibutun, 2020; Talaee et al., 2020). Prospective studies on this matter determining the influences of workload on the burnout of mental health practitioners could provide more appropriate approaches for studying the possible outcome of these syndromes and factors that may lead to burnout (Chatterjee et al., 2020). Therefore, in the current research, I aimed to help better understand the factors that led to burnout among a group of psychologists as a result of the pandemic. Addressing this research gap may facilitate the identification of possible solutions that can be recommended to reduce the rate of burnout in the healthcare system.

      J. Johnson et al. (2020) discussed the growing problem of burnout rates among mental healthcare professionals. These authors conducted research through an online cross-sectional survey to measure clinical supervision rates, workloads, disengagement, and burnout. The data of 298 psychological therapist participants indicated that higher supervision rates were linked to lower disengagement; however, they did not demonstrate lower exhaustion. On the other hand, supervision and workloads did not reflect a correlation with burnout rates. According to the study, 78.9% of the participants were notably suffering from "high burnout," while 58.1% were classified as being "highly disengaged" (J. Johnson et al., 2020). Notably, the authors did not mention the pandemic as a possible factor in their study. By attributing burnout rates to increases in mental health cases and workload, these authors provided insights into heightening stress levels. The economic effects of the current pandemic may lead to escalations in caseloads, increased workloads, and eventually increases in burnout rates among mental health service providers. Additional research is required to determine the precise factors that

have impacted burnout rates among mental health professionals during the COVID-19 crisis.

Statement of the Problem

The problem that I aimed to address through this study is the lack of research on the factors that have contributed to increased burnout rates among mental healthcare providers during the COVID-19 pandemic. The overwhelming obligation placed on mental health providers to care for the sick and their families, coupled with the fact that mental health providers are already at risk for higher rates of burnout, indicate that mental health providers are likely experiencing considerably high rates of burnout as a result of the COVID-19 pandemic (Khanal et al., 2020). It is necessary to understand the factors contributing to burnout during the wake of the pandemic, as burnout is associated with a disrupted therapeutic alliance, decreased retention, and poor treatment outcomes (O'Connor et al., 2018).

Purpose of the Study

The purpose of this quantitative, correlational survey study was to examine the factors that contribute to burnout among psychologists during the COVID-19 pandemic in the United States. By administering one well-established burnout measure and an emerging measure on the work-related impact of the pandemic, I sought to uncover the specific factors contributing to burnout among psychologists in the wake of the COVID-19 pandemic. By examining these factors among a sample of psychologists, I aimed to better understand how burnout has manifested among mental health professionals during the COVID-19 pandemic.

Theoretical Background of the Study

The Maslach theory of burnout was used as the theoretical framework for this study. The exploration of burnout among healthcare professionals was introduced in the 1970s by Freudenberger, who observed morale and reduced commitment among volunteers in healthcare clinics (Joshi & Sharma, 2020). Shortly after that, Maslach began to develop his theory of burnout, ultimately designing a scale measuring burnout known as the Maslach Burnout Inventory (MBI; Bruyneel et al., 2021). The MBI is now considered the standard scale for measuring burnout, and it is recognized internationally as the most frequently used scale for assessing burnout (Lim et al., 2020). In the current study, I employed the MBI to examine the rate of burnout among the sample participants. Based on Maslach's theory, burnout is described as a state that occurs as a consequence of a prolonged difference between an individual and six work dimensions: workload, control, reward, community, fairness, and values.

These six work dimensions have specific descriptions and meanings. The workload work dimension describes when an individual is involved in an excessive workload so that recovery cannot be gained (Bruyneel et al., 2021). Control relates to when an employee has insufficient control of their job's completion (Al Mutair et al., 2020). The reward work dimension refers to the lack of enough social, financial, and intrinsic reward for the job done (Bruyneel et al., 2021). The community dimension describes the failure of employees to connect with their working partners and manager, thus reducing social support and frustration (Lim et al., 2020). Fairness is when an individual experiences unfair treatment at the workplace, such as inequity of pay

(Bruyneel et al., 2021). Lastly, the values work dimension denotes when individuals are engaged in a conflict between their values and the organization's value, leading to constrain of their job (Bruyneel et al., 2021). These are the six work dimensions that describe burnout as per Maslach's theory. There are other models of burnout, with differences in the description and the cause of burnout. Some authors have regarded burnout as a process, unlike Maslach, who conceptualized burnout as a state (Ghanayem et al., 2020; Sarwar et al., 2021).

Research Question and Hypothesis

The following research question and research hypothesis were formulated after identifying a gap in the existing literature concerning the factors that influence burnout rates among clinical psychologists practicing during the COVID-19 pandemic:

RQ1. Will factors specific to the pandemic, as measured by the Pandemic Experiences and Perceptions Survey (PEPS), influence the experience of burnout, as measured by the Maslach Burnout Inventory—Health Services Survey (MBI-HSS), among clinical psychologists practicing during the COVID-19 pandemic?

Null hypothesis. Factors measured by the PEPS will not predict burnout as measured by the MBI-HSS in clinical psychologists who practiced during the pandemic.

Alternative hypothesis. The factors measured by the PEPS will predict burnout as measured by the MBI-HSS in clinical psychologists who practiced during the pandemic.

Nature of the Study

In the current study, I employed a quantitative, correlational design to explore the factors that influenced clinical psychologists' burnout during the COVID-19 pandemic.

Burnout rating data from clinical psychologists who practiced during the COVID-19 pandemic were examined. The MBI-HSS was used to examine the specific type of burnout experienced by the study population. The participants' responses to the PEPS elucidated the factors that influenced burnout among the study population related to practicing during the pandemic. There were no control variables identified for this study. The dependent variable in this study was burnout, as measured by the MBI-HSS. The independent variables of this study were the factors contributing to burnout, as measured by the PEPS.

Primary data were collected through the digital platform SurveyMonkey, where participants were recruited and screened for participation in this study. Potential participants were provided with all required materials (e.g., inclusion/exclusion criteria screeners, consent form, the contact information for the principal researcher, etc.) to ensure their eligibility for this study. Eligible participants then received the study materials, including a demographics questionnaire, the MBI-HSS, and the PEPS. The MBI-HSS is a 22-item survey designed to examine burnout among health service professions (Maslach, 1993). The MBI-HSS examines the three domains of burnout across three subscales: Emotional Exhaustion (EE), Depersonalization (DP), and low sense of Personal Accomplishment (PA). The three subscales are comprised of questions regarding frequency through a 7-point Likert-style scale, including the following responses: *never*, *a few times a year or less*, *once a month or less*, *a few times a month*, *once a week*, *a few times a week*, and *every day* (Maslach, 1993).

Participants then completed the PEPS, a newly created measure designed to examine employee experiences related to working during a pandemic (Mind Garden, 2020). The PEPS examines six categories of potential symptomology: disruption, resources, risk perception, the impact of work-life areas, perceptions of leadership, and open-text items. The PEPS takes approximately 5–10 minutes to complete and provides comprehensive insight into employees' experiences during the pandemic.

The collected data were analyzed using regression analysis to examine whether there is a positive correlation between psychologists' burnout as measured by the MBI-HSS and pandemic-specific factors as measured by the PEPS. I predicted that there would be a strong positive relationship between negative work-related experiences resulting from the pandemic and the experience of burnout among the study's population. A regression analysis was used to determine what pandemic-specific factors have contributed to burnout among psychologists. It was expected that disruption to resources and increased impact of work-life areas would predict higher rates of emotional exhaustion, depersonalization, and personal accomplishment among clinical psychologists practicing during the COVID-19 pandemic.

Definition of Terms

Burnout: Burnout refers to a state of physical, mental, and emotional exhaustion caused by prolonged and excessive stress (Alrawashdeh et al., 2021).

Depersonalization: Depersonalization refers to feelings of being alienated or unfamiliar with one's surroundings (Miguel-Puga et al., 2021).

Emotional exhaustion: Emotional exhaustion describes the state of feeling emotionally drained and worn out due to accrued stress from personal responsibilities, occupational factors, or a combination of both (Alrawashdeh et al., 2021).

Maslach Burnout Inventory (MBI): The MBI is a psychological assessment instrument comprising 22 indication items relating to work-related burnout (Zalewski et al., 2021).

Mental health professional: A mental health professional is a clinical care practitioner or human and social services provider who delivers services to improve mental well-being or treat mental illnesses (Kohlhoff et al., 2021).

Pandemic Experiences and Perceptions Survey (PEPS): The PEPS is a powerful instrument used to measure workers' experiences during the COVID-19 pandemic (Azoulay et al., 2020).

Personal accomplishments: Personal accomplishments are attainments linked to someone's objectives and are achieved primarily through hard work (Chatterjee et al., 2020).

Psychologist: A psychologist is a licensed, doctoral-level mental health professional who offers clinical or counseling services to examine and treat behavioral, emotional, and mental illnesses (Kohlhoff et al., 2021).

Social Change Significance

The anticipated outcome of the current study was that it would provide much-required insight into the factors that contributed to increased burnout in mental health professionals due to the pandemic. Examining burnout among mental health providers

enabled the identification of possible solutions to reduce the rate of burnout in the healthcare system. The findings of this research may also help to improve mental health professionals' performance by decreasing the negative treatment impact of burnout. These problems may also be solved by coming up with new and practical strategies for handling clients in emergencies or when mental health needs escalate. Further, the results of this study are likely to aid in achieving possible future reductions in burnout rates among mental health professionals, given that the pandemic is likely to persist for years to come. Understanding the factors that have increased burnout throughout the pandemic may assist in the identification of prevention strategies for the future, thus reducing and possibly preventing an increase in burnout rates among mental health professionals.

Assumptions and Limitations

Assumptions are the aspects of a study that are accepted as true or reasonable by scholars and peers (Hu & Plonsky, 2021). The assumptions of a study are believed to be accurate but cannot be validated as true (Hu & Plonsky, 2021). For the current study, I assumed that the clinical psychologists who participated in the study were honest in responding to the survey questions. I also assumed that SurveyMonkey would be an effective digital platform for recruiting and screening mental health professionals for participation in this study. Clinical psychologists were presumed to be reachable digitally via SurveyMonkey. Another assumption was that the PEPS would be an appropriate instrument for measuring the factors contributing to burnout during the COVID-19 pandemic and that the MBI-HSS was a suitable tool for measuring burnout.

In research, limitations are the features of methodology or design that can influence the interpretation of the results from a study (Ding et al., 2020). These are the weaknesses within a study methodology or design that can impact the findings and conclusions of the study (Ding et al., 2020). There were three potential limitations considered for this study. First, I anticipated that obtaining an appropriate sample size of clinical psychologists might be difficult due to the ongoing demands of their professional practice as a result of the pandemic. In the same vein, given that the pandemic started more than 1 year ago, I anticipated that many psychologists might have already recovered from their burnout symptomology. A second anticipated limitation of this study was regarding the use of the MBI-HHS and the PEPS. It was possible that partner-site agreements would be required to use these instruments and that fees for access to the instruments would be present. Similarly, it was challenging to convert these measures to a method that effectively distributes among participants. The emerging psychometric properties of PEPS presented a possible limitation in the interpretation of the study's findings.

Scope and Delimitations

The scope and delimitations in research describe the subject and limits of the study problem to be examined (Akanle et al., 2020). The scope outlines how comprehensive a study is to explore the research question, as well as the parameters in which it operates relative to the timeframe and population (Akanle et al., 2020). The delimitations are the variables and factors not to be comprised in the assessment (Akanle et al., 2020). Only clinical psychologists who practiced and were practicing during the

pandemic were assessed in the current study. This specifically helped to address the identified research question. The identified influencers of burnout were not generalized to clinical psychologists who practiced before COVID-19 and those who started after the pandemic. The identified factors that influence burnout among clinical psychologists were specific to the COVID-19 pandemic. Burnout was measured using the MBI-HHS because it is a well-validated, widely implemented self-survey measure. As the MBI-HHS is widely accepted as a measure of burnout, the findings and conclusions from this study can be generalized to the entire population of clinical psychologists.

Summary

There is emerging evidence that mental health professionals experienced burnout at rates between 21% and 61% before the pandemic (O'Connor et al., 2018); nevertheless, no scholars have yet explored the impact of the pandemic on burnout rates. Ongoing research during the COVID-19 pandemic has indicated an association between burnout and sleep disorders, increased alcohol consumption, sedentarism, depression, obesity, and musculoskeletal pain (Dinibutun, 2020; Talaee et al., 2020); however, the factors that contribute to increased burnout rates among mental healthcare providers during the COVID-19 pandemic are not known. The purpose of this quantitative, correlational survey study was to examine the factors that contribute to burnout among psychologists during the COVID-19 pandemic in the United States. By examining these factors among a sample of psychologists, I aimed to better understand how burnout has manifested among mental health professionals during the COVID-19 pandemic. Burnout rating data from clinical psychologists who practiced during the COVID-19 pandemic were

examined. Primary data were gathered via the SurveyMonkey digital platform. The MBI-HSS was employed to evaluate the particular type of burnout experienced by the study population. The PEPS was administered to elucidate the factors that influenced burnout among the study population related to practicing during the pandemic. The collected data were scrutinized using a correlational design in IBM SPSS Statistics version 26 to determine whether there is a relationship between psychologists' burnout as measured by the MBI-HSS and pandemic-specific factors as measured by the PEPS. A multiple regression analysis was then conducted to determine what pandemic-specific factors have contributed to burnout among psychologists. Chapter 2 includes a review of the theoretical and empirical literature that informs the COVID-19 pandemic-specific factors contributing to burnout among mental health professionals.

Chapter 2: Literature Review

Chapter Introduction

As the impact of the COVID-19 pandemic continues to be felt, mental health providers are being called upon to deliver care to those who have lost loved ones and provide support to families of actively sick patients, all while managing their own professional obligations. According to previous research, mental health professionals experienced burnout rates between 21% and 61% before the pandemic (O'Connor et al., 2018). The problem that I addressed through this study was the lack of understanding of the factors that contribute to increased burnout among clinical psychologists during the pandemic. As such, the purpose of this quantitative study was to provide an understanding of the factors that have contributed to increased burnout rates among mental healthcare providers during the pandemic. Work environment, caseload sizes, and severity of symptoms contribute to mental health professionals' burnout (Practice Research & Policy Staff, 2018). Other than the already-known factors that lead to burnout, it was critical to understand the specific issues that have led to increased burnout during the pandemic period.

Mental health professionals have managed a substantial increase in workload and the rise in severity of client symptoms while adjusting to drastic change in the work environment (A. Johnson et al., 2020). As the healthcare industry continues to face the challenges associated with this virus, there is little research on changing professional dynamics and responsibilities. This gap in knowledge means that there is little information on the factors that have influenced burnout among mental health

professionals during the pandemic. The purpose of this quantitative, correlational survey study was to examine the factors that have contributed to burnout among psychologists in the United States during the COVID-19 pandemic period. By identifying these factors, the findings may contribute to understanding how burnout has manifested among mental health professionals in this demanding time of the pandemic. By identifying the high burnout rates among this population, it may be possible to develop informed treatment and supportive strategies to enable mental health providers with the ability to provide healthcare to and improve outcomes for their patients.

The following search engines were used to develop this review: Google Scholar, EBSCOhost Online Research Databases, JSTOR: Journal Storage, and Wiley Online Library. The online databases included Academic Search Complete, APA PsycInfo, PsychiatryOnline via American Psychiatric Publishing, APA PsycArticles, and Access Medicine. The key search terms and combination of search items that were input to various online databases included the following: *burnout*, *stress*, *fatigue*, *exhaustion*, *mental health professionals*, *therapists*, *counselors*, *psychologists*, *social workers*, *COVID-19*, *occupational stress*, *compassion fatigue*, and *Maslach Burnout Inventory*. All of these key terms yielded studies that were relevant to the problem under study.

Iensured that the majority of the studies included were published between 2018 and 2020 in order to ensure that the relationships between variables were representative of the latest findings. A total of 77 publications were included in this review, of which 66 (85%) were published between 2018 and 2021 and 12 (19%) were published before 2018. The time interval for current sources was appropriate, as the first case of COVID-19 was

identified in 2019, but studies published in the year 2018 were included in the study in order to demonstrate the probable changes in healthcare before the pandemic. Research on the social effects of COVID-19 is ongoing, and new studies that reflect the goals of the study could have been added.

In this chapter, I provide an expanded background to the research problem addressed in the previous chapter in this literature review. The first section includes a discussion of the literature search strategy used to write the literature review. The second section focuses on the theoretical framework of the study, which is the Maslach theory of burnout. The third section highlights the general mental health burden of COVID-19 among healthcare professionals. The fourth section centers on the increased need for mental health professionals and burnout among mental health professionals due to the increase in patients in need of care. The fifth section is an exploration of the adverse effects of burnout and its predictor variables. The final section of the literature review focuses on the factors that contribute to burnout and its impact on patients and professional obligations. The chapter ends with a summary of the conclusions of the literature review.

Theoretical Framework

Maslach's burnout theory served as the theoretical framework and foundation for this study. Maslach developed this theory from Freudenberg's study on morale and reduced commitment among healthcare workers in the 1970s (Joshi & Sharma, 2020). According to Maslach, burnout undermines the care and professional attention given to clients who need human service professionals such as healthcare providers, teachers,

lawyers, and security personnel, among others (Maslach, 1993). Maslach's theory of

burnout has three dimensions: emotional exhaustion, cynicism, and low personal

accomplishment. Emotional exhaustion is defined as the depletion of emotional

resources.

Emotional exhaustion is the most widely reported dimension of burnout in

comparison to depersonalization and lowers personal accomplishment. According to

McCormack et al. (2018), this dimension received burnout scores from up to 34% of the

participants, and more than 40% of the studied participants reported high to moderate

levels of emotional exhaustion. The findings of McCormack et al. were consistent with

those by Simionato and Simpson (2018), who noted high levels of emotional exhaustion

for the overall healthcare providers in the study at 39.9%. In the study by Simionato and

Simpson, more than half of the participants (56%) established that they reported high

levels of emotional exhaustion. Emotional exhaustion also has a stronger relationship

with the intention of workers to quit their jobs than any other form of job stress or

burnout. Clinical psychologists recorded the highest levels of emotional exhaustion

compared to any other category of mental health professionals (Dreison et al., 2018).

Similarly, emotional exhaustion was displayed by 43.75% of nurses and can vary among

individuals depending on the prevailing situations (Tavares et al., 2014). According to

Tavares et al. (2014), emotional exhaustion is associated with the high demands of a job

and working for an extended period, leading to continued pressure and stress.

Cynicism, or depersonalization, is the development of negative, cynical attitudes

and feelings about a client (Maslach, 1993). Depersonalization is a burnout dimension

expressed by change in a person's attitude towards work, change in behavior, progressive

loss of idealism, decline in energy, and decreased sense of the meaningfulness of work

(Maslach, 1993). In some people, depersonalization is associated with ordinary fatigue,

lack of control, negative thoughts, and detachment from social relationships with fellow

employees, which aggravates the extent of the conflict and work-related problems

(Maslach, 1993). Maslach (1993) defined depersonalization as a dreamlike feeling of

being disengaged in the work environment and taking work-related issues less seriously

than they should be. Despite the fact that depersonalization does not cause harm to a

person, it may lead to extreme disturbance for the person who is experiencing it (Brady et

al., 2020). In a study by Tavares et al. (2014), depersonalization was experienced by

37.5% of the nurses, and it was characterized by having a negative viewpoint on their job.

The majority of the nurses who experienced depersonalization showed complete

withdrawal from their job; they were isolated from their patients and exhibited low

satisfaction. Indeed, more than 66% of the nurses showed low levels of personal

satisfaction. Lebares et al. (2018) studied depersonalization among medical doctors,

finding that it is associated with workplace environmental factors such as having

excessive workload that is mentally and physically strenuous, deadline-related pressures,

difficult work phases, and work climate.

The last dimension, low personal accomplishment, is the tendency to evaluate

oneself negatively (Maslach & Jackson, 1981). According to Maslach (1993), reduced

personal accomplishment is a negative assessment that is characterized by a strong

feeling of failed performance in the workplace. Tavares et al. (2014) explored this

dimension of burnout among nurses, finding that when employees exhibit low personal accomplishment, they tend to become unsatisfied with the work they are doing—a problem that may lead to more serious effects. Indeed, the problem may drive nurses to quit their careers (Tavares et al., 2014).

Despite scholars such as Maslach (1993) and Tavares et al. (2014) viewing lower personal accomplishment as a dimension of burnout, several authors have considered it a separate element with the argument that it differs from emotional exhaustion and depersonalization. For instance, Lee and Ashforth (1996) and Koeske and Koeske (1993) argued that personal accomplishment reflects workers' personal characteristics as opposed to their stressful reactions, and thus it should not be considered as a dimension of burnout but rather as an individual resource. The argument of these authors was that personal accomplishment is a unique resource that develops primarily based on the personal attributes of a person, and hence it is independent of emotional exhaustion and depersonalization. Other scholars such as Guenette and Smith (2018), Maslach, and Tavares et al. have explored personal accomplishment as a dimension of burnout and have studied it as a part of the conceptual framework on work-related stress and health outcomes.

In addition to the studies by Guenette and Smith (2018), Maslach (1993), and Tavares et al. (2014), Pehlivanoğlu and Civelek (2019) applied this theory to investigate whether personal accomplishment is related to emotional exhaustion and depersonalization. Pehlivanoğlu and Civelek conducted a study on sales department employees who were working in the pharmaceutical industry. While understanding that

the literature had not provided a consensus on the internal dimensions relating to burnout,

Pehlivanoğlu and Civelek sought to determine whether the three dimensions were related.

Their findings indicated that there is a negative and significant relationship between the

three dimensions of burnout: emotional exhaustion, personal accomplishment, and

depersonalization. These authors recommended more studies to increase personal

accomplishment among employees, indicating the need for further research such as the

current investigation.

Relevance of Theoretical Framework

As explained by Maslach's theory of burnout, the three dimensions of burnout

have been applied in numerous studies. For instance, Wright and Caudill (2020) found

that the influence of burnout is commonly related to mental health impairment due to

workplace issues. When burnout presents itself in the workplace, it poses a risk to

professional and personal obligations. Emotional exhaustion may impact how healthcare

workers connect with coworkers and patients. Depersonalization influences a detachment

from patients or clients (Miguel-Puga et al., 2021). Low personal accomplishments may

ignite feelings of inadequacy or internal frustrations, which may influence a sense of

failure and ineffectiveness in the workplace (Joshi & Sharma, 2020).

Bruyneel et al. (2021) posited that burnout occurs when individuals are involved

in excessive workloads and do not have the time to recover. On the same note, Al Mutair

et al. (2020) applied the Maslach theory of burnout and found that insufficient control of

job completion may be a factor that also contributes to burnout. Further, lack of social

and financial reward (Bruyneel et al., 2021), failure to connect with partners, reduced

social support, and frustration are also determinants of burnout (Lim et al., 2020). Similarly, Bruyneel et al. applied this theory and concluded that unfair treatment in the workplace and conflict between the individual's values and that of the organization were leading factors in burnout rates (Bruyneel et al., 2021).

The Maslach theory of burnout was appropriate for the current study due to my goal of understanding the impact of burnout from COVID-19. This theory enabled an exploration of the issue based on three dimensions: emotional exhaustion, depersonalization, and lower personal accomplishment. It guided me in the framework of inquiry and analysis. In addition, the theory was appropriate because it provided an ideal tool to conceptualize the research problem relating to burnout that I sought to investigate. Maslach developed a survey that was used for this study to collect data for subsequent analysis and inference. The survey provided insights into employee experiences. The six categories of measurement are disruption, resources, risk perception, work-life areas' impact, leadership, and open text items. While the impact of the pandemic is still being uncovered, it is essential to recognize the experiences and challenges that mental health providers have had to face. Insight, in conjunction with MBI-HSS, may pinpoint where significant challenges are.

My aim in applying this theory was to identify possible causes of burnout and solutions to reduce the rate of burnout in the healthcare system during the COVID-19 pandemic period. Reducing burnout rates can influence more than mental health professionals' performance, as mental health providers have had to alter their face-to-face, close-contact relationships with clients (Whaibeh et al., 2020), which has

significantly changed treatment strategies (Chatterjee et al., 2020). In the effort to obtain a comprehensive view of the different facets related to burnout, Maslach's theory is an appropriate lens. It is detailed, structured, and well developed with appropriate tools for an in-depth inquiry and analysis.

Literature Review

Overview of COVID-19 Pandemic Effects on Mental Health Professionals in the United States

Healthcare workers who are exposed to COVID-19 might have an increased risk of developing mental health problems (Khanal et al., 2020; Ornell et al., 2020). Regarding this, several studies have been conducted to identify the risk factors and causes that are associated with poor mental health among professionals. A study by Khanal et al. (2020) found that the overall effect of the COVID-19 pandemic on health workers and founded that COVID-19 represented 41.9% of participants' self-reported cause for mental health-related symptoms and 37.5% for depression- and insomnia-related symptoms. Khanal et al. also found that stigma among health workers was also significantly associated with higher levels of anxiety, depression, and insomnia. The history of patients' medication also aggravated mental health problems, which increased poor health among professionals in the United States. Lack of adequate precautionary measures in the workplace was also associated with a higher probability of developing mental health symptoms such as anxiety and depression among nurses and other health professionals. Nurses were significantly more likely to experience mental health-related symptoms in comparison to other healthcare workers. The findings by Khanal et al.

resonated with those by Ornell et al. (2020), who found that the increased risk of infection among healthcare professionals contributed to poor mental health.

There were different causes of increased risk of developing mental health conditions. Indeed, Tsamakis et al. (2020) found that nearly half of the participants (45%) in their study who were frontline workers in COVID-19 management reported anxiety related to changes in their roles. Further, the lack of precautionary measures in their workplace during the outbreak was associated with changes in mental healthcare. Further, 49.1% of the participants working during the pandemic were working overtime, which was associated with poor mental health. The problem was also evidenced among participants in a study by Braquehais et al. (2020) due to lack of sufficient government incentive to properly satisfy employees to provide services. More than half of participants (53%) in a study by Khan et al. (2020) were faced with stigma because of their profession, which was associated with mental issues. In Khan et al.'s study, 5.9% of the participants were even asked to leave their rented place by landlords due to the fear that they were carriers of the disease.

Numerous factors were associated with poor mental health during the COVID-19 pandemic period. The prevalence of poor mental health among healthcare providers was associated with a high level of COVID-19 exposure (Bettinsoli et al., 2020). According to Bettinsoli et al. (2020), healthcare providers who were in the first line of clinical responsibilities and those infected showed a higher level of prevalence and anxiety and exhibited depressive symptoms. Blanco-Donoso et al. (2020) concluded that the fears of colleagues and their families were a major cause of distress. Little is not known of the

related situations that may have caused great quarantine and need for hospitalization, which makes it difficult to get involved when they have made end-of-life decisions, a move associated with traumatic experiences. This problem was also associated with accompanying dying patients when their families could not be there due to preventive measures.

A shortage of personal protection equipment was also associated with poor mental health, especially for those first-line workers (Bettinsoli et al., 2020). Due to the increase in the prevalence of COVID-19, this became a problem when providing healthcare workers with places that they can rest or sleep, which could have lessened the impact of the physical and psychological exhaustion. There were no significant differences between those who worked in public and private health facilities. On the same dimension, the authors identified an increased risk for physical and mental health during the pandemic.

Regarding the increased need for mental health treatment among health practitioners, a significant number of studies pointed at an increased risk of women who were having mental issues during the pandemic (Bettinsoli et al., 2020). Most of the youthful health providers were more scared of the virus, while more established providers were also stressed over the danger of death. Middle-aged healthcare providers appeared to be lesser frightened by the problem. In any case, the fear among them of being infected, either themselves or their family members, was higher among those having kids, albeit little is known about those who take care of the aged people in their families or who have had recorded deaths from COVID-19 in their families (Bettinsoli et al., 2020). Social help has been reliably viewed as a protective factor that decreases the danger of

encountering mental distress during the pandemic (Di Tella et al., 2021). On the same note, the effect was aggravated when there are some personality character attributes, like neuroticism, feeling dejection, or having past mental issues, have been found to improve the probability of experiencing nervousness or burdensome side effects, while extraversion, self-viability or parental connection style have been found to cultivate resilience (Braquehais et al., 2020). Little is thought at this point about self-treatment with legitimate medications (for example, narcotics, sedatives), alcohol, or illicit medication use among healthcare professionals during the COVID-19 pandemic as a maladaptive adapting methodology and the danger of creating substance abuse based mental disorders

Prevalence of Burnout Levels in Healthcare

Scholars have explored the prevalence of burnout among different healthcare professionals. For instance, Di Tella et al. (2021) suggested that healthcare professionals are more prone to experience burnout, which has seen a rise in the prevalence significantly over the recent years. The findings of Di Tella et al. also indicated that burnout prevalence from 45 countries was high based on the analysis of data published between 1991 and 2018. From the study by Rotenstein et al. (2018), 85.7% of the reviewed studies showed a high level of burnout, based on findings that used the MBI for measurement. Scholars have further reported the prevalence of burnout among health providers and accompanying burnout subcomponents at 67%, while 72% reported emotional exhaustion, 68.1% indicated depersonalization, and 63% reported low personal accomplishment. The findings by Rotenstein et al. are consistent with those by Dyrbye et

al. (2018), who noted that overall burnout among healthcare professionals in the United

States was as high as 80.5%. Regarding the three dimensions of burnout, the highest-

level prevalence of emotional exhaustion was reported at 86.2%, 89.9% for

depersonalization, and 87% for low personal accomplishment (Rotenstein et al., 2018).

Nonetheless, there were differences in the level of burnout due to inconsistencies in the

definition of burnout. As such, it is not clear on the level of burnout among the people

based on sex, age, geography, time, as well as in specialty.

A review of the studies examining the prevalence and determinants of burnout

among healthcare providers among developed countries has also indicated a lower rate

among Middle Eastern and non-western countries (Elbarazi et al., 2017). In light of this,

the Middle East has a significant rate of burnout among healthcare providers, which

could be attributed to its fragmented health system. Many Middle Eastern countries have

a shortage of healthcare professionals, a problem that is attributed to brain drain (Elbarazi

et al., 2017). This is the same scenario evidenced in most areas with low staffing,

including underdeveloped countries (Rotenstein et al., 2018). The issue is further

exacerbated by the low level of experts, which continues to put enormous strain on

healthcare systems and providers.

The prevalence of estimates of burnout is comparable between the non-Arabic-

speaking countries, including Canada, France, United Kingdom, and the United States.

More importantly, the three dimensions of burnout were congruent in most of the

developed countries such as Belgium, Poland, England, Scotland, the United States,

Wales, and the United Kingdom. In particular, the level of emotional exhaustion (EE)

among nurses was reported at 75% in Belgium, for England it was 52%, Japan had a high level of EE among psychiatrists at 21%, while in Poland, the rate of EE was 71% for psychiatrists (Rotenstein et al., 2018). Health providers in the United States were recently reported at a high level of burnout of 78% (Williamson et al., 2018). Indeed, the level of self-reported burnout among medical professionals was reported at 44.2, 42%, and 50% (Williamson et al., 2018). The findings were consistent with those by Hewitt et al. (2020), who cited that the rates of burnout among healthcare workers were high and even comparable to those in low-income countries.

Izakova et al. (2020) conducted a study in Slovakia on the prevalence of burnout among psychologists. All data was processed in statistical programs and assessed using the contingency coefficient Cramer's V and statistical significance. Their results indicated that the most frequent occupation categories were 38.2% outpatient psychiatrists, 26.1% inpatient psychiatrists, and 20.4% psychologists (Izakova et al., 2020). The main sources of stress were huge workload, prognoses, and other public presented information. Personal stress was most common, followed by general and working stress among mental health experts (Izakova et al., 2020). There may be a pathological effect of COVID-19 on the mental status of their patients, particularly those with anxiety and affective disorders, and the use of telemedicine (Izakova et al., 2020). This study contributed valuable information on the need for psychosocial support for medical professionals.

In Australia, a study conducted by McCade et al. (2021) used a sample of 69 psychologists who met the criteria for burnout. Of the 69 participants, 42 psychologists reported at least mild depressive symptoms. Burnout and depression were significantly

associated with each other, while a negative correlation was found between self-compassion and burnout and depression. Self-compassion moderated the relationship between burnout and depression, and psychologists with high levels of burnout and low to moderate levels of self-compassion had higher levels of depressive symptoms.

Role of Mental Health Providers

The current body of literature contains information regarding the role of the different types of mental health practitioners. A portion of these experts are found in an emergency clinic and local area settings, and each of the accompanying experts works with the individual and family to help create abilities and methodologies to oversee considerations, emotions, and behaviors that affect emotions and psychological wellness (Harris & Plucker, 2014). The ultimate goal of mental health professionals is to advance the mental well-being of one to work independently, show self-care, and sustain productivity in areas of work (Fujioka et al., 2018).

According to the literature, a psychiatrist is a clinical specialist who spends significant time providing treatment and ensuring the psychological well-being of mental health patients. This incorporates diagnosis, making prescriptions, and checking on patients' medication. As a member of the mental health treatment, a psychiatrist is likewise associated with a patient's treatment and care plan. A few psychiatrists also conduct therapeutic counseling (Harris & Plucker, 2014). On the other hand, psychologists hold a doctoral or postdoctoral degree in counseling. They are prepared through the training process to assess an individual's emotional wellness utilizing clinical meetings, mental assessments, and testing (Fujioka et al., 2018). They can make a

diagnosis and give individual as well as group therapy. Some might have the necessary

training for specific forms of therapy such as cognitive-behavioral therapy, dialectical

behavior therapy, or other behavioral therapeutic interventions (Fujioka et al., 2018).

Case managers have also been considered as part of the mental health worker. This is a

general title for the expert from the emotional well-being framework assigned to assist

with organizing a patient's recuperation (Fujioka et al., 2018). They assist patients with

getting to treatment, counseling, social, professional, and pay upholds. They may have

foundation skills and knowledge as a social specialist or medical attendant.

Nurses, who may include Registered Nurses (RN), Registered Psychiatric Nurses

(RPN), and Licensed Practical Nurses (LPN), are a part of the restorative group in the

diverse patients' health needs. These professionals help facilitate therapy, along with

prescriptions by the providing prescriber, and serve to direct the patients' advancement to

be checked and recorded (Fujioka et al., 2018). They also assist in offering the needed

support to the patient. Family nurse practitioners (FNP) are also part of the mental health

team, as they can offer general clinical types of assistance—like those of an essential

consideration doctor—in light of each state's laws (Adams & Vanderhoef, 2021). Like

essential consideration doctors, they can endorse prescription; however, the patients

should seriously think about visiting somebody who has some expertise in emotional

wellness care (Fujioka et al., 2018). Family nurture experts and emotional well-being

experts should cooperate to decide a singular's best treatment plan.

Social workers (including mental health social workers, community liaisons,

psychiatric social workers, and concurrent disorders social workers) have information on

family and social history, family workings, and explicit spaces of social work (e.g.,

addictions, reception, substance abuse, local area living administrations, mental health).

In a health facility, a social worker might arrange for the appropriate discharge of the

mental disorder patient (Adams & Vanderhoef, 2021). When one leaves the medical

clinic, other local area hospital social workers might arrange the recuperation and

facilitate the resources needed to regain normalcy (Fujioka et al., 2018). They may also

assist in devising needed solutions to the patients' problems in daily life.

The counselor may know counseling methodologies. They provide guidance and

direction on conducting the board, advancing abilities and systems to deal with the

musings, feelings, and practices that affect patients' psychological well-being (Fujioka et

al., 2018). A counselor may also be involved in helping the patient to learn more about

him or herself and probably aid in recovering from mental illnesses (Harris & Plucker,

2014). Occupational therapists have knowledge and information on activity analysis and

promotion of self-care, efficiency (work, school, chipping in), and relaxation. They help

patients in the improvement of local area living abilities, including work abilities, social

abilities, and suitable conduct (Harris & Plucker, 2014). They empower patients to seek

after occupations and exercises that they need or need to do (Harris & Plucker, 2014). At

times in their therapy, they may incorporate teaching skills, provide education, and offer

resources to do this.

Burnout in Psychologists and Other Mental Health Workers

Psychological wellness work, particularly in the modern COVID-19 period, is

distressing and may trigger burnout, which is associated with ongoing work-related

pressure, bringing about passion fatigue and dejection (Barello et al., 2020). The

contribution of the COVID-19 pressures is partly due to the increased pressure at work

and the intrinsic desire of the psychologist to aid however many customers as would be

prudent; clinicians make for a particularly weak group. For instance, Luther et al. (2017)

directed a study that explored the experiences of 182 psychologists, the findings of which

displayed the inclination for clinicians to overextend themselves with work. The results

of another study, encompassing 474 psychotherapists, demonstrated that 61% of

clinicians meet the standards for depression. While there are different positive

perspectives to being emotional wellness laborers, there are likewise others that can be

baffling for clinicians while they oblige and conform to the post-COVID-19 period given

its particularly difficult demands (Zhang et al., 2021).

Psychological well-being specialists, which include therapists, analysts, doctors,

and social laborers, are presented to psychosocial stressors all through their vocation,

which can prompt burnout. Bettinsoli et al. (2020) found that work-related pressure has

been hindering mental well-being of clinicians, and has been emphatically connected

with tension, anxiety, depression, anger, and has contributed to non-attendance and poor

occupation-related relational contentions (Tsamakis et al., 2020). Furthermore, overall

stress has been observed to be connected with cardiovascular disease, lowered body

immunity, and gastrointestinal conditions, which might bring about delayed strain. This

delayed strain might prompt weariness and depletion of individual assets, essentially

influencing the quality of life and care for patients (Tsamakis et al., 2020). As such,

during the pandemic period, it is expected that clinicians may experience burnout
multiple times.

The debilitating demand drains the nature of psychotherapy and makes clinicians
a fragile group regarding the weakness of stress. For example, examining 182 clinicians,
Luther et al. (2017) showed that 52% of members report staying at work past 40 hours at
any given week, which resulted in sensations of estrangement, indications of burnout, and
diminished work fulfillment. Furthermore, psychological wellness work is upsetting and
has regularly been depicted as causing burnout, which includes persistent business-
related pressure related to enthusiastic fatigue and depression (Luther et al., 2017).

According to Tsamakis et al. (2020), psychotherapists' burnout has additionally
been described as resulting in fatigue, criticism, diminished proficient adequacy, and
frequent thinking about one's customers. Tsamakis et al. found that 2–6% of
psychotherapists experience "all-out" burnout at some random time, while upwards of
25–35% of specialists experience burnout and wretchedness to the degree that it meddles
with work capacities. On the same note, emotional exhaustion was higher among
psychologists and professionals who worked with COVID-19 patients (Barello et al.,
2020). On the same note, frontline workers experienced high levels of depersonalization
(Zhang et al., 2021). Personal gratification emerged as the protective factor among
healthcare workers in COVID-19 units (Barello et al., 2020). Furthermore, burnout was
higher in high-income countries than in low- and middle-income countries (LMICs;
Morgantini et al., 2020). Burnout was higher in those countries where the COVID-19
pandemic was surging at the time of data collection, including the United States

(Morgantini et al., 2020). Similarly, McCade et al. (2021) found that psychologists with high levels of burnout and low to moderate levels of self-compassion reported significantly higher levels of depressive symptoms.

Simpson et al. (2020) investigated work setting, main sources of stress, and prevalence of burnout, and identified the predominant early maladaptive schemas (EMS) and maladaptive coping modes (MCM) prevalent among this population. These authors investigated whether EMS and MCMs predict burnout above job demands among psychologists during the pandemic period in the United States. Simpson et al. (2020) used measures that included demographics, job demands, early maladaptive schemas, coping schema modes, and burnout. Simpson et al. expressed that the stressors that caused the most severe distress were the challenge of work-life balance, managing clients with chronic issues, and managing very distressed clients. Out of the 443 participants, 18.3% were experiencing high levels of emotional exhaustion, with 29.6% in the moderate range and 51% in the low range. This was a relatively higher level of burnout among the psychological therapists compared to the year before the pandemic. One such study is that was conducted by Endriulaitienė et al. (2019) among the professions in Lithuania and the United States. The study was conducted among 234 mental health professionals (111 social workers and 123 psychologists) from Lithuania and 93 professionals from the United States (33 counselors, 23 social workers, and 37 psychologists). Ninety-three percent were women, and the average age of the participants was 39.81 years of age. Endriulaitienė et al. reported that prevalence of burnout among U.S. psychologists was at an average of 35%.

Adverse Effects of Burnout in Mental Health Professionals

There are diverse effects of burnout among health professionals that scholars have explored. The common, widely explored effect of burnout among mental health professionals is the psychological aspect.

Psychological Effect of Burnout Among Health Professionals

According to Stuijfzand et al. (2020), burnout among psychologists and mental health providers causes psychological distress, insomnia, alcohol/drug misuse, symptoms of PTSD, depression, anxiety, burnout, anger, and higher perceived stress. In relation to this, Warchol-Biedermann et al. (2021) found that mental health professionals face stress, dysfunctional coping strategies, and other mental health issues.

Similarly, Tokac and Razon (2021) conducted a study to understand the effects of nurses' years of nursing experiences and mental health on work impairment. This survey was administered to 83 nurses, and the instruments used were a Patient Health Questionnaire, Generalized Anxiety Disorder Scale, Insomnia Severity Index, Impact of Event Scale-Revised, Compassion Fatigue, and Work Productivity and Activity Impairment Questionnaire. The study surveyed nurses from the U.S. Midwestern region, and the 83 nurses were actively employed in hospitals, homes, and correctional institutions. These authors observed an indirect effect between depression, burnout, insomnia, years of nursing experience, and work impairment (Tokac & Razon, 2021). Indeed, the findings indicated a negative correlation between the participants' years of experience, avoidance, and work impairment. There was a direct effect between anxiety and work impairment and an indirect effect between depression, burnout, insomnia, and

experience and work impairment. The findings were consistent with those of Yang et al. (2020), who found that physical therapists are more likely to experience depressive symptoms, leading to burnout symptoms because most of their rehabilitation programs are in-person.

Yang et al. (2020) investigated the mental health burden of COVID-19 on physical therapists. The factors evaluated included stress and anxiety levels, psychological distress, and other mental health symptoms. This study was conducted with physical therapists from three university hospitals in South Korea in early April 2020. The findings by Yang et al. indicated that individuals around 30 and 50 years of age had a higher risk of depression than those in their 20s. Twenty-one physical therapists scored higher than 5 in the GAD-7, which indicates anxiety. The value of this study is that the investigators considered the risk of depression in relation to demographic factors such as age and having children. On the same dimension, burnout among healthcare providers was associated with compassion fatigue, burnout, and compassion satisfaction, and perceived stress was common among healthcare professionals during the COVID crisis in Spain (Ruiz-Fernández et al., 2020). Towey-Swift and Whittington (2021) found that compassion satisfaction and compassion fatigue were not significantly associated with recovery attitude. Ali et al. (2021) studied the impact of COVID-19 on mental well-being in Kenya, concluding that depression, anxiety, insomnia, distress, and burnout were reported in 45.9%, 48.2%, 37.0%, 28.8%, and 47.9% of all nurses, which affected their engagement with work and at home. The findings of Ali et al. corresponded with

previous evidence that there are different types of burnout, including personal, work-related, and client-related burnout (Dhusia et al., 2019).

Work-Related Impact of Burnout

In addition than the psychological effects associated with burnout among psychologists, it also affects their work delivery. According to Panagioti et al. (2018), physician burnout may jeopardize patient care; reversal of this risk must be viewed as a fundamental healthcare policy goal across the globe. Panagioti et al. made the above conclusion after conducting a study to investigate how physical burnout is associated with low-quality, unsafe patient care. The results of Panagioti et al. also indicated that physician burnout was significantly associated with an increased risk of patient safety incidents, poorer quality of care due to low professionalism, and reduced patient satisfaction. The links between burnout and low professionalism were larger in residents and early-career physicians, in comparison with physicians who were later in their careers. The reporting method of patient safety incidents and professionalism significantly influenced the main results. The findings were consistent with those of Morgantini et al. (2020), who noted that burnout among healthcare workers affected their professionalism, engagement at work, and ultimate level of satisfaction.

Mukhtar (2020) found that mental health issues relative to the COVID-19 pandemic may evolve into long-lasting health problems. This author noted that the permeated feelings of vulnerability, isolation/quarantine, fear, anxiety, psychological distress, psychosocial stressors, posttraumatic symptoms, stigma, and xenophobia, are associated with poor health outcomes among patients. Similarly, Cheng et al. (2020)

found that clinicians had a high prevalence rate of PTSD if they worked directly in

COVID-19 units, reducing their concentration and communication skills with the

patients. Further, emotional exhaustion could also be detected as characterized by

abandonment, mistrust/abuse, and emotional inhibition (Simpson et al., 2020). Similarly,

burnout contributed to physical health issues such as musculoskeletal pain, prolonged

fatigue, headaches, and gastrointestinal and respiratory issues (Morgantini et al., 2020).

Predictors of Burnout

Scholars have examined the different factors that could be considered as

predictors of burnout. They have identified different predictors of burnout, ranging from

socio-demographic to work-related.

Socio-Demographic Factors

In light of this, age and gender were positively associated with depersonalization.

Education and personal accomplishment were significantly correlated. Healthcare

professionals in public practices had higher emotional exhaustion levels (Lim et al.,

2010). On this note, Simionato and Simpson (2018) found that the personal risk factors of

burnout among psychotherapists were younger age, work experience, and over-

involvement in client problems. In relation to this, Rossler (2014) found that individuals

with a lifetime mood disorder, and especially those with a combination of mood and

anxiety disorders, had a higher risk for subsequent burnout.

Scholars also examined Socio-demographic factors and their relationships on

burnout. For instance, Hwang et al. (2021) found that female employees, younger

employees, and those with shorter tenures had higher emotional exhaustion after working

with COVID-19 patients. Similarly, Győrffy et al. (2016) found that the prevalence of

depressive symptoms, suicide attempts, and sleep disorders was higher among female

physicians. The findings of Hwang et al. (2021) and Győrffy et al. (2016) indicated that

burnout levels in healthcare facilities were associated with gender, with females being the

most widely affected demographic group. A. Johnson et al. (2020) also studied the effect

of gender on burnout. Of their 298 participants, 235 recorded "high burnout," and 173

participants reported suffering from disengagement. High-quality supervision is not

associated with lower exhaustion. A therapists' frequency of supervision and workload

did not impact their burnout symptoms. Women are more likely to have higher

exhaustion; however, gender did not affect disengagement.

  From a social perspective, self-oriented perfectionism influences burnout

(Boumans & Dorant, 2021). Boumans and Dorant found that job demands and family

demands were positively correlated with burnout and caregivers' burden. In relation to

this, Clough et al. (2020) found that factors of stigma perceived another stigma, perceived

structural stigma, personal stigma, and self-stigma influence burnout. Clough et al.

conducted their study to understand some of the social factors that could affect the level

of burnout among people. The specific purpose of their study was to develop and validate

the Mental Health Professional Stigma Scale in a study that encompassed 221 Australian

mental health professionals who completed the MHPSS via online survey following a

subsample who completed the same survey 2 weeks later. Clough et al. concluded that

the Mental Health Professional Stigma Scale could capture attitudes and beliefs related to

occupational stress and burnout among mental health professions, findings that were consistent with those by Boumans and Dorant (2021).

Mitake et al. (2019) also conducted a similar study to clarify the association between mental-illness-related stigma and burnout among nonprofessional occupational mental health staff. This study was cross-sectional in nature. The results revealed that mental-illness-related stigma was significantly associated with a high degree of the depersonalization dimension of burnout.

Working Conditions

Other than socio-demographic factors, researchers have also explored the different working conditions that influenced burnout. The use of technology was found to contribute significantly to burnout by Isautier et al. (2020). According to Isautier et al., telehealth experiences were poorer than their traditional in-person medical appointment experiences. Their findings, however, were inconsistent with those by Joshi and Sharma (2020), who argued that the use of technology in healthcare, especially during the pandemic period, reduced the level of anxiety and provided greater convenience to the psychologists and other mental health effects. The issue of contention between Isautier et al. (2020) and Joshi and Sharma (2020) was based on the fact that the former was concerned with the impact of telehealth on the health provider while the latter was considering the effect on the patient.

Poor reward or low pay was also found to be a key contributor to higher rates of burnout among health providers. Burnout is more common among general practitioners or specialists, those working at highly loaded hospitals, and those with low salaries

(Alrawashdeh et al., 2021). The findings by Alrawashdeh et al. resonated well with those by Rokach and Boulazreg (2020), who noted that reward is a sign of recognition after the hard, but it was not sufficiently cited for a psychotherapist who worked during the pandemic period in the United States. According to Rokach and Boulazreg (2020), psychologists working at all levels need to see the results of their own perceived competence. During this period, there lacked proper recognition of the mental health professionals when they did well, while the primary focus was on those working in pharmacological sections and treatment for the COVID-19 patients. Specifically, the therapist cited a lack of adequate motivation among administration regarding financial incentives or rewards during the pandemic, which contributed significantly to burnout.

Lack of resources was also cited as a cause for burnout among psychologists during the pandemic. According to McMahon et al. (2020), who analyzed global resource shortages, PPE and respiratory devices are scarce commodities for many hospitals. On this note, working more than 50 hours per week and having more patients are associated with higher levels of burnout (Nimmawitt et al., 2020). Similarly, Zhang et al. (2021) found that hospitals should pay attention to health monitoring and personal protection and create a rational human resource allocation and shift management system. This was close to the need for the psychotherapists to supervise their patients continually. J. Johnson et al. (2020) similarly found that frequency of supervision and workload variables were not associated with either facet of burnout. Moreover, Joshi and Sharma (2020) found that mental health practitioners are dealing with an increasing number of tele-counseling to

address corona anxiety; the venting of negative emotions by the patient can cause mental health practitioners to experience similar feelings. This leads to emotional exhaustion.

Reducing and Protecting Against Burnout

Previous researchers have explored the different approaches and methods of reducing burnout. For instance, Morse et al. (2012) found that the most effective programs for reducing burnout in the future are those that combine individual and organizational interventions. Organizational interventions improved depersonalization, job satisfaction, absences, civility, respect, and trust of management (Morse et al., 2012). Similarly, O'Connor et al. (2018) found that being treated fairly and receiving a fair reward for one's work appears to be protective of burnout rates.

Training on infection control is an essential tool for reducing burnout. For instance, Zhang et al. (2021) found that burnout can be prevented by specific training on infection control and self-protection, mental health guidance, and stress coping techniques must be implemented. Inconsistent with the conclusions of Zhang et al., Labrague and De Los Santos (2021) indicated that vaccine status is an indicator of burnout prevention. As such, both Zhang et al. (2021) and Labrague and de Los Santos (2021) found that in order to prevent burnout, there should be adequate training among workers on how to reduce burnout among them. In addition, Mitake et al. (2019) found that cognitive-behavioral training and counseling, as well as adaptive coping with refresher courses, decrease burnout.

In addition to training, it is also imperative to support them with the available resources. On this note, internet-based resources, emotional support hotlines,

psychological first aid, and self-care strategies can decrease burnout rates (Morgantini et al., 2020). Through such support, they may also be able to develop self-compassion, which may act as a protective measure against depression and burnout (McCade et al., 2021). Sandheimer et al. (2020) also found that collaborative care measures were more common among the stressed intervention participants. Similarly, Győrffy et al. (2016) found that the personal accomplishment component of burnout significantly decreased in line with the declining work-related satisfaction.

Increasing reward and provision of better working conditions was also associated with a reduction in burnout. On this note, improving salary scales, reducing duty hours, creating better opportunities for early-career physicians, expanding the health workforce, and developing pandemic-related unified and clear protocols for HCP's reduce burnout (Alrawashdeh et al., 2021). The increase in salaries and provision of good working conditions was also based on the need to create positive feelings and motivation. Warchol-Biedermann also determined the presence of a positive and significant relationship between stress, dysfunctional coping strategies, and mental health.

Benefits of Reducing Burnout Among Psychologists

According to scholars, reduction of burnout among psychologists could benefit both the clients and the psychologists. In relation to the benefit among clients, at the point when clinicians are confronted with the need to make judgments that require a careful decision, proficient discourse between specialists might be a crucial piece of the goal cycle (West et al., 2018). This is particularly significant in high-hazard issues (i.e., those including the chance of being hurt by the client), as they might incite extreme emotions

among the specialists, leading to a diminished ability to focus on expected goals (West et al., 2018). Alternately, when psychologists themselves are going through unpleasant occasions, clinicians may unexpectedly be pretentious of their customer's issues, disarray, and battles (Klein et al., 2020). In this manner, within sight of a negligible or all-out absence of expert discourse, the patient might be both limited and underestimated, further requesting a spot for psychological well-being experts to impart.

Unbeknownst to them, psychologists may likewise utilize treatment in a way that is too unbending in scope. For instance, in mental consideration, the dealings of delicate issues rigorously through a clinical mental model (i.e., one which keeps a weighty adherence to determinations, side effects, and prescriptions) may fail the client when the psychologist does not adjust the social and internalized conflict of the customer. Proficient discourse on these occasions expands the specialist's point of view and significantly upgrades the customer's treatment. In reviewing the study by Heeter et al. (2017), it emerged that none of the 129 examined psychologists considered themselves having less than ideal capacities. The authors noted that this kind of pomposity, verging on self-importance, advances focus to the value of what discourse can do among clinicians. According to Klein et al. (2020), when a psychologist is performing optimally, with limited burnout, there is a greater probability of addressing competence issues and eliminating blind spots.

Another benefit when a psychologist is free from burnout is the enhanced ability to address customers from different cultural backgrounds. Relatedly, researchers have indicated that although therapists may feel efficacious while working with clients from

different cultural dimensions, there is a probability of causing harm to them unknowingly (West et al., 2018). As such, when a psychologist is suffering from burnout, there is a possibility of providing resolutions that are oblivious to the client's cultural background (Di Tella et al., 2021). When the patient is able to address the diverse cultural backgrounds, however, it becomes easy to navigate the discussion and share the cultural background.

Conclusion

Due to the emergence and persistence of the COVID-19 pandemic, mental health providers have been faced with an immense workload. The problem has affected the families and the psychologists who have witnessed people lose their loved ones. According to the global statistics, the level of burnout averaged between 21–16%. In the United States, the prevalence of psychologists' burnout stands at 51%, emphasizing the need for more studies to understand this category of health providers, who are rarely studied. The increased burnout among health providers has caused adverse effects to them as well as to the patients. In addition, scholars have explored the numerous methods that can be used to reduce burnout and ultimately enable psychologists to provide better outcomes.

Despite the high prevalence of burnout among U.S. psychologists, as demonstrated in the literature, limited research focuses on this group, especially during the COVID-19 pandemic. The purpose of the current quantitative study was to provide an understanding of the factors that contribute to increased burnout rates among mental healthcare providers during the pandemic. The researcher used Maslach's burnout theory

of burnout to serve as the theoretical framework and foundation for this study. Maslach

developed this theory from Freudenberg's study on morale and reduced commitment

among healthcare clinics in the 1970s. According to Maslach, burnout undermines the

care and professional attention given to clients who need human service professionals

such as healthcare providers, teachers, lawyers, and security personnel, among others. As

such, the researcher applied Maslach's theory of burnout and its three dimensions of

emotional exhaustion, cynicism, and low personal accomplishment to understand the

causes of burnout among psychologists during the COVID-19 pandemic period.

Chapter 3: Research Method

Introduction

The purpose of this quantitative, correlational survey study was to examine the factors contributing to burnout among psychologists during the COVID-19 pandemic in the United States. By administering one well-established burnout measure and an emerging measure on the work-related impact of the pandemic, I aimed to uncover the specific factors contributing to burnout among psychologists in the wake of the COVID-19 pandemic. By examining these factors among a sample of psychologists, I sought to better understand how burnout has manifested among mental health professionals during the COVID-19 pandemic. Chapter 3 begins with a discussion pertaining to the research method and rationale. This section provides familiarity with the role of the researcher and the study's methodological design, including the process of recruiting participants, the selection process, instrumentation, and the plans for data collection and analysis. Finally, this chapter ends with a discussion of ramifications pertaining to the validity and limitations of this study.

Research Design and Rationale

The following research question and research hypothesis were formulated after identifying a gap in the existing literature concerning the factors that influence burnout rates among clinical psychologists practicing during the COVID-19 pandemic:

RQ1. Will risk perception, disruption to workflow, and impact on work life specific to the pandemic, as measured by the Pandemic Experiences and Perceptions Survey (PEPS), influence the experience of burnout, as measured by the Maslach

Burnout Inventory—Health Services Survey (MBI-HSS), among clinical psychologists

practicing during the COVID-19 pandemic?

Null hypothesis. Risk perception, disruption to workflow, and impact on work life

measured by the PEPS will not predict burnout as measured by the MBI-HSS in clinical

psychologists who practiced during the pandemic.

Alternative hypothesis. Risk perception, disruption to workflow, and impact on

work life measured by the PEPS will predict burnout as measured by the MBI-HSS in

clinical psychologists who practiced during the pandemic.

I selected the quantitative methodology to examine the factors that have

contributed to burnout among psychologists during the COVID-19 pandemic in the

United States. A quantitative approach is a deductive approach that focuses on providing

evidence supporting a theory using the objectivity of statistical tests in investigating a

particular topic to gain a better understanding of the topic through analysis of numerical

data (Schober et al., 2018). Quantitative analysis is an objective approach to test the

presence, strength, and direction of relationships between variables. Moreover, the data

collection method uses surveys or quantitative measures that result in numerical scores

for each (Ellis & Levy, 2008). In this study, prevalidated surveys for measuring burnout

and factors contributing to burnout were used to numerically measure the constructs.

While the measure used for burnout was a well-validated survey, the measure related to

the experiences of the COVID-19 pandemic was a preliminary measure. For this reason,

researchers are actively collecting information related to the validity of the measure. Due

to the novelty of the pandemic, this measure was considered prevalidated. Because

numerical data were collected for the study, a quantitative approach was deemed to be the most appropriate.

In this study, the study variables—consisting of the two survey responses from participants—were quantified for analysis. The numerical representations of the variables involved in the study were used to analyze potential relationships between the variables (Kerlinger & Lee, 2000). A quantitative methodology was more appropriate than a qualitative or mixed-methods approach. Quantitative methods involve examining relationships among numerically measured variables, which cannot be accomplished with qualitative data. Specifically, the purpose of the study was to examine the factors contributing to burnout among psychologists during the COVID-19 pandemic in the United States. Therefore, the quantitative approach was more appropriate than the qualitative methodology.

The qualitative approach is more focused on addressing *how* and *why* questions. Using a quantitative method for research, a researcher has more control over how the data are gathered using a survey questionnaire; this takes place through a more distant investigation with no direct interaction between the researcher and the participants. An outside perspective is gained using this method with a lower likelihood of incorporating the researcher's personal biases if statistical tests are used to provide conclusions. Quantitative methods are more structured than qualitative approaches in using closed-ended data collection instruments (Ellis & Levy, 2008; Kerlinger & Lee, 2000).

The research design was nonexperimental and correlational in nature. This design enables researchers to examine the factors contributing to burnout without manipulating

an independent variable. The correlational design was nonexperimental because the data were collected using an online survey at one point in time. An online survey hosted on SurveyMonkey was administered to collect participants' responses on burnout and the factors contributing to burnout. Participants used their current experiences and perceptions to respond to the survey items. No manipulation of variables was possible given the constructs that were being studied. The focus of the study was to identify relationships of factors to the burnout score of participants rather than to test an intervention (Gravetter & Forzano, 2018). In comparison, an experimental design involves randomly assigning participants to an intervention group to test the effectiveness of a treatment or an intervention, which was neither possible nor required to answer the research question for this study. Therefore, a nonexperimental approach was appropriate.

A correlational research design that focused on examining and measuring potential relationships between identified variables was employed in the study. A correlational design is used when a causal relationship is not sought (Kerlinger & Lee, 2000). Justification of the selected design was based on the appropriateness of the design to address the research questions and data for each variable. Specifically, the research questions focused on the potential relationships between factors such as disruption, resources, risk perception, the impact of work-life areas, and perceptions of leadership on the burnout experienced by psychologist participants during the COVID-19 pandemic in the United States. Therefore, a correlational design was deemed to be appropriate.

Methodology

Population

The target population for this study included clinical psychologists in the United States. There are approximately 106,500 clinical psychologists in the United States (American Psychological Association Center for Workforce Studies, 2018). The inclusion criteria for this study included licensed clinical psychologists who (a) were aged 18 years old and above, (b) practiced during the COVID-19 pandemic, and (c) resided in the United States. Participants with no access to the internet were excluded from the study because the data collection involved an online survey.

Sampling and Sampling Procedures

Participants in the study were sampled using a convenience sampling technique. Convenience sampling is a nonprobability sampling technique wherein participants are recruited based on their availability and willingness to participate in the study. A request letter was sent to organizations of clinical psychologists in the United States to ask permission to recruit participants from among their members. After gaining approval, I sent a recruitment email to the mailing list of the organizations to recruit participants for the study. Interested participants were asked to click a link to SurveyMonkey in the recruitment email. A list of screening questions was provided in the SurveyMonkey link to ensure that interested participants were eligible for the study.

To ensure that a sufficient number of samples were gathered for the study, an a priori sample size calculation was conducted using G*Power v3.1.0. For this study, a multiple regression analysis considering the six subscales of PEPS as predictor variables

and burnout as the dependent variable was conducted. For a medium effect size of .15, a

statistical power of at least .8 with an alpha of .05, and a multiple regression analysis with

six predictors, I determined that the minimum number of samples necessary for the study

was 98 participants. In order to ensure that there were 98 sets of completed data from

participants, I aimed to recruit at least 115 participants for the study.

Procedures for Recruitment, Participation, and Data Collection

Prior to collecting data for the study, I obtained approval from the Institutional

Review Board (IRB). Upon gaining all necessary approval, I used SurveyMonkey to

recruit clinical psychologists in the United States. The recruitment process included

informing interested individuals of the purpose of the study, the inclusion criteria, and the

role of participants in the study. Participants were first screened through SurveyMonkey

to determine their eligibility to participate in the study. Eligible participants were then

directed to the survey in SurveyMonkey and given the demographics questionnaire, the

PEPS, and the MBI-HSS. Participants were asked to contact me for any questions or

clarifications about the study.

After clicking the link to the survey, participants were directed to a list of

screening questions to ensure that they were eligible for the study. Eligible participants

were directed to the informed consent form. The informed consent form informed

participants that their participation was completely voluntary and that they had the option

to skip any item or withdraw from the study at any time without negative implications.

Participants who agreed to the informed consent form electronically were directed to the

survey on factors that influenced burnout and burnout. After completing the survey,

participants were thanked for their participation. The data collection period took

approximately 1 month, or until at least 98 participants had completed the survey

questionnaires. All data were then imported to SPSS v26.0 to prepare for data analysis.

Instrumentation

A demographics questionnaire, the MBI-HSS, and the PEPS were used to gather

participants' responses. Necessary permissions were obtained from the authors of the

questionnaires. The MBI-HSS is a 22-item survey designed to examine burnout among

health service professions (Maslach, 1993). The MBI-HSS examines the three domains of

burnout across three subscales: Emotional Exhaustion (EE), Depersonalization (DP), and

low sense of Personal Accomplishment (PA). The three subscales are comprised of

questions regarding frequency through a 7-point Likert-style scale with the following

options: *never*, *a few times a year or less*, *once a month or less*, *a few times a month*,

once a week, *a few times a week*, and *every day* (Maslach, 1993). According to Maslach

(1993), the MBI-HSS has a Cronbach's alpha score of .90 for Emotional Exhaustion, .76

for Depersonalization, and .76 for Personal Accomplishment. The test-retest validity of

the MBI-HSS was also reported to range from .60 to .82, indicating that the questionnaire

is reliable and valid in measuring the construct of burnout. The MBI-HSS was purchased

for use in this study, and the receipt noting permission to use the instrument for the

purposes of this research can be found in Appendix B.

Participants then completed the PEPS, a newly created measure designed to

examine employee experiences related to working during a pandemic (Mind Garden,

2020). The PEPS examines six categories of potential symptomology: disruption,

resources, risk perception, the impact of work-life areas, perceptions of leadership, and open-text items. The PEPS takes approximately 5–10 minutes to complete and provides comprehensive insight into employees' experiences during a pandemic. The Cronbach's alpha value for PEPS was determined to be .86, with a test-retest validity of .70 to .83. The responses of participants in the survey questionnaire were summed to calculate the scores for each dimension of MBI-HSS and PEPS, as well as the overall score for burnout. Given the novelty of the PEPS and its relevance to understanding the impact of the COVID-19 pandemic, the measure is available for free to researchers. Permission to use the PEPS was obtained; the notice of permission can be found in Appendix A.

Data Analysis

The data collected in the study were prepared for analysis in SPSS v26.0 software. The collected data were cleaned for missing values. The data cleaning process involved removing incorrect, incomplete, or duplicate cases, as well as fixing corrupted or incorrectly formatted cases. Cases with more than 50% missing values were excluded from the study. Missing values were substituted using the mode for each item because the responses were based on Likert-type scales. Frequencies and percentages were used to present the demographic characteristics of participants, while measures of central tendencies were used to present the burnout subscale scores and the scores for the factors contributing to burnout.

Prior to conducting the statistical tests to address the research questions, I tested the assumptions of a multiple regression analysis. Shapiro-Wilk's test was used to determine whether the data followed a normal distribution (Field, 2013). Scatterplots

were used to determine whether there was linearity and homogeneity in the data. Boxplots were used to determine whether there were outliers in the dependent variable burnout scores. To test for multicollinearity, the variance inflation factor (VIF) was used. A VIF value of 10 and below would indicate that the multicollinearity assumption was met. For the assumption of independence, a Durbin-Watson statistic of 1.5 to 2.5 would indicate that the assumption was met. To address the research question for this study, multiple regression analysis was conducted. The factors of potential symptomology, including disruption, resources, risk perception, the impact of work-life areas, perceptions of leadership, and open-text items, were used as predictors; the overall burnout score was used as the dependent variable. To further analyze the data, subscales of burnout were used as dependent variables. A significance level of .05 was used for all analyses.

Ethical Considerations

Five specific ethical principles guided my ethical concerns for this study: (a) minimizing the risk of harm to participants, (b) obtaining informed consent, (c) protecting the anonymity and confidentiality of participants, (d) avoiding deceptive practices such as involuntary participation, and (e) providing the right for participants to withdraw from the study at any time without any punishments or negative implications (Fouka & Mantzorou, 2011). These principles were adhered to and addressed during the recruitment of participants and prior to any data collection in the consent procedure before participants agreed to respond to questions. Permissions and IRB approval were obtained prior to commencing the data collection procedures.

The data that I gathered in this study were anonymous. I did not know the identity of any participants in the study. While ID numbers were assigned to all participants in SurveyMonkey, no names were associated with the ID numbers. Interested participants who met the inclusion criteria were asked to read and agree to the informed consent form on the first page of the survey. Participants were required to click on "I agree" to proceed to the survey items. Participants' identities were protected by deidentification of-survey responses in SurveyMonkey. No personally identifiable information was collected in the study. After the surveys were completed, I downloaded and saved the dataset in a password-protected folder on my personal laptop. This file will be saved and stored for 5 years before being permanently deleted from my laptop through a data-wiping application.

Summary

The purpose of this quantitative, correlational survey study was to examine the factors that have contributed to burnout among psychologists during the COVID-19 pandemic in the United States. A prevalidated survey questionnaire measuring burnout and the specific factors contributing to burnout was used to measure the constructs of the study. The target population of the study included clinical psychologists during the COVID-19 pandemic. A sample of at least 98 participants responded to an online survey via SurveyMonkey. Participation in the study was anonymous and voluntary. Data were analyzed using descriptive statistics and multiple regression analysis to address the guiding research question of the study.

Chapter 4: Results

Introduction

The purpose of this quantitative, correlational survey study was to examine the factors that have contributed to burnout among psychologists during the COVID-19 pandemic in the United States. The MBI-HSS was used to measure burnout, while the PEPS was used to measure the work-related impact of the COVID-19 pandemic. By examining these factors among a sample of psychologists, I aimed to provide a better understanding on how burnout has manifested among mental health professionals during the COVID-19 pandemic.

The following research question and research hypothesis were formulated after identifying a gap in the existing literature concerning the factors that have influenced burnout rates among clinical psychologists practicing during the COVID-19 pandemic:

RQ1. Will risk perception, disruption to workflow, and impact on work life specific to the pandemic, as measured by the Pandemic Experiences and Perceptions Survey (PEPS), influence the experience of burnout, as measured by the Maslach Burnout Inventory-Health Services Survey (MBI-HSS), among clinical psychologists practicing during the COVID-19 pandemic?

Null Hypothesis. Risk perception, disruption to workflow, and impact on work life measured by the PEPS will not predict burnout as measured by the MBI-HSS in clinical psychologists who practiced during the pandemic.

Alternative Hypothesis. Risk perception, disruption to workflow, and impact on work life measured by the PEPS will predict burnout as measured by the MBI-HSS in

clinical psychologists who practiced during the pandemic.

This chapter includes the descriptive statistics of burnout, risk perception, disruption to workflow, and impact on the work life scores of participants. The results of the assumptions testing for linear regression analysis are then presented. This chapter also includes the results of the linear regression analysis to address the research question and test the hypothesis posed in the study. The chapter ends with a summary of the key findings of the data analysis.

Descriptive Statistics

A total of 195 participants responded to the survey invitation. After cleaning the data for missing values, 58 participants had more than 50% of missing values. Therefore, a total of 137 participant responses were included in the data analysis for this study. The responses of participants on the MBI-HSS were used to measure the burnout score. The responses of participants for the items were averaged to calculate the burnout score. On the other hand, the responses of participants on the subscales of PEPS were used to measure the variables of disruption, resources, risk perception, impact on work life areas, and leadership.

The descriptive statistics of the study variables are presented in Table 1. The mean burnout score was 3.24 ($SD = 0.65$). Among the PEPS variables, the highest mean score was observed for resources ($M = 3.79$, $SD = 0.78$). The impact on work life areas variable had a mean of 3.67 ($SD = 0.78$), while the risk perception variable had a mean of 3.54 ($SD = 1.12$). The lowest mean score was observed for the disruption variable, which had a mean of 3.48 ($SD = 0.75$).
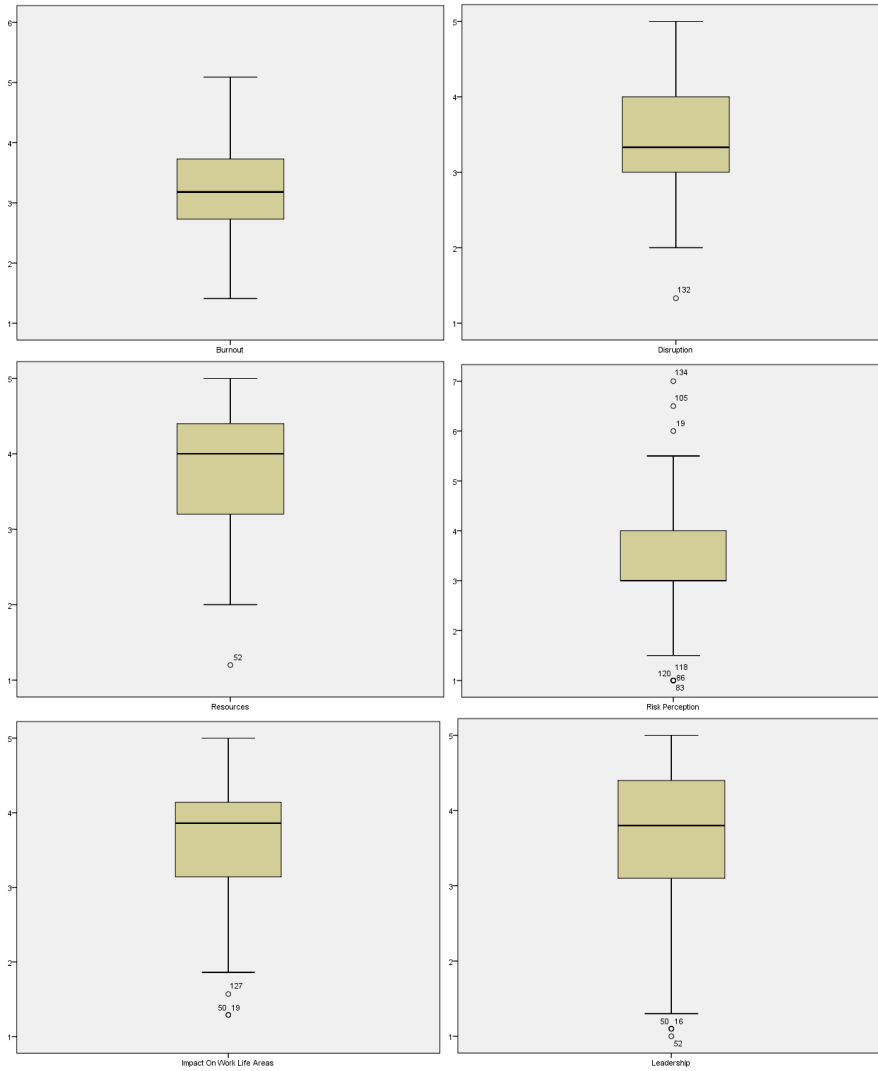
Table 1

Descriptive Statistics of Study Variables

	N	Minimum	Maximum	Mean	SD
Burnout	137	1.41	5.09	3.24	0.65
Disruption	137	1.33	5.00	3.48	0.75
Resources	137	1.20	5.00	3.79	0.78
Risk perception	137	1.00	7.00	3.54	1.12
Impact on work life areas	137	1.29	5.00	3.67	0.78
Leadership	137	1.00	5.00	3.66	0.98

To test the assumptions of a linear regression analysis, boxplots, normal P-P plot, collinearity statistics, and Durbin-Watson statistics were used. The boxplot for the burnout variable is presented in Figure 1. The boxplot showed that there is no outlier in the data for burnout. As also observed in Figure 1, however, the boxplots for the PEPS subscale variables showed outliers for disruption, resources, risk perception, impact on work life areas, and leadership variables. To handle the outliers, the outliers were substituted using the nearest acceptable value for the variable. Through the use of the nearest acceptable value, the variabilities in the data were controlled and did not have an effect on the result of the linear regression analysis.

Figure 1

Boxplots for Burnout, Disruption, Resources, Risk Perception, Impact on Work Life

Areas, and Leadership Variables

After substituting the outlier values with the nearest acceptable value, the descriptive statistics were recalculated. The results of the descriptive statistics are presented in Table 2. The results showed that the highest mean score among the PEPS variables was for resources ($M = 3.79$, $SD = 0.76$), followed by impact on work life areas ($M = 3.68$, $SD = 0.75$) and leadership ($M = 3.66$, $SD = 0.97$). The lowest mean score was still observed for the disruption score at 3.48 ($SD = 0.74$).

Table 2

Descriptive Statistics of Study Variables Without Outliers

	N	Minimum	Maximum	Mean	SD
Burnout	137	1.41	5.09	3.24	0.65
Disruption	137	2.00	5.00	3.48	0.74
Resources	137	2.00	5.00	3.79	0.76
Risk perception	137	1.50	5.50	3.54	1.01
Impact on work life areas	137	1.86	5.00	3.68	0.75
Leadership	137	1.30	5.00	3.66	0.97

To test whether the residuals were normally distributed, the normal P-P plot was used (see Figure 2). As observed, the residuals followed the normal distribution because the data points were along the normal line. Therefore, I concluded that the assumption of the normality of residuals was met.

Figure 2

Normal P-P Plot

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Burnout
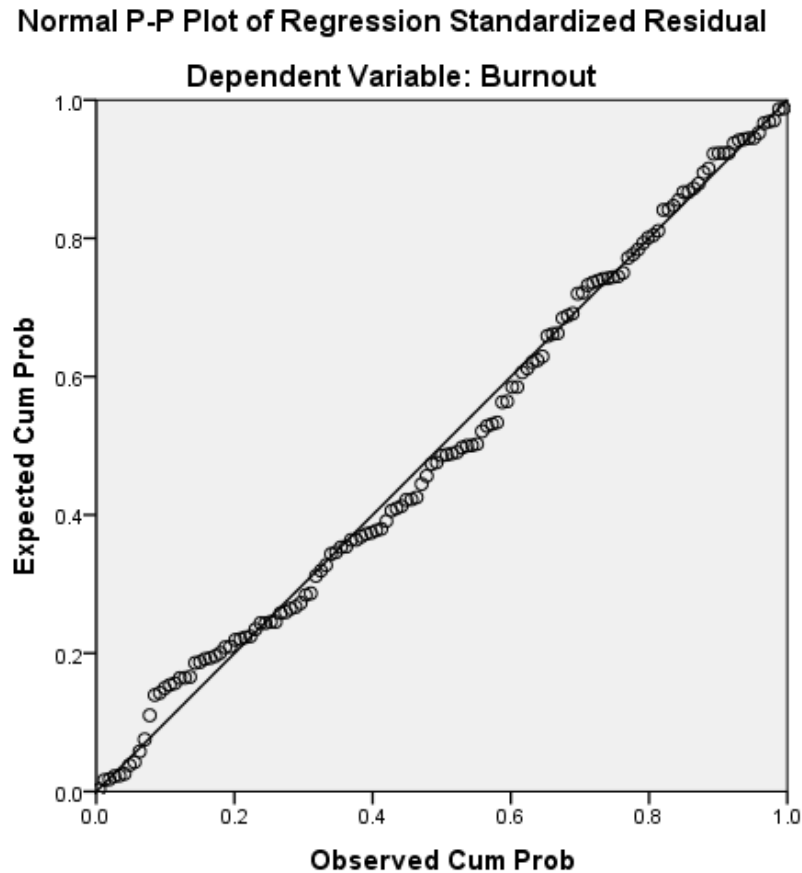
    To test the assumption for multicollinearity, the VIF was employed. A VIF score

above 10 indicates that there is multicollinearity between the predictor variables. The VIF

scores ranged from 1.100 to 3.465, which indicated that the assumption of

multicollinearity was met. Moreover, the Durbin-Watson statistic was used to test the

assumption of independence. The Durbin-Watson statistic was determined to be 2.026. A

Durbin-Watson value ranging from 1.5 to 2.5 indicates independence. Therefore, I

concluded that the assumption of independence of observation was also met.

Table 3

Collinearity Diagnostics

	Collinearity statistics	
	Tolerance	VIF
Disruption	0.909	1.100
Resources	0.427	2.343
Risk perception	0.933	1.072
Impact on work life areas	0.347	2.879
Leadership	0.289	3.465

After testing all assumptions and determining that all assumptions had been met, I conducted a linear regression analysis to determine whether risk perception, disruption to workflow, and impact on work life specific to the pandemic, as measured by the PEPS, influenced the experience of burnout, as measured by the MBI-HSS, among clinical psychologists practicing during the COVID-19 pandemic. The result of the regression analysis determined that variables of disruption (B = 0.172, *p* = .019), risk perception (B = 0.130, *p* = .014), and impact on work life areas (B = -0.328, *p* = .005) significantly predicted the burnout score of participants. The results showed that a 1-unit increase in disruption score results in an increase of 0.172 in the burnout score. A 1-unit increase in the risk perception score results in an increase of 0.130 in the burnout score. An increase of 1 unit in the impact on work life areas results in a decrease of 0.328 in the burnout score. Among the three variables, the strongest predictor of burnout is the impact on work life areas. The model was determined to be significant in predicting the burnout score ($F(5,136) = 6.534$, *p* < .01). The predictors also explain 16.9% of the variance in burnout scores. There was sufficient evidence to reject the null hypothesis posed in the study.

Table 4

Linear Regression Results

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std. error	Beta	*t*	Sig.
1 (Constant)	2.956	0.494		5.987	0.000
Disruption	0.172	0.072	0.195	2.376	0.019
Resources	-0.060	0.103	-0.070	-0.582	0.561
Risk perception	0.130	0.052	0.202	2.498	0.014
Impact on work life areas	-0.328	0.115	-0.380	-2.865	0.005
Leadership	0.180	0.098	0.268	1.839	0.068

Note. Dependent variable: Burnout; $F(5,136) = 6.534$, $p < .01$, adj. R-squared $= .169$.

Summary

The purpose of this quantitative, correlational survey study was to examine the

factors that have contributed to burnout among psychologists during the COVID-19

pandemic in the United States. I administered the MBI-HSS to measure burnout and the

PEPS to measure the work-related impact of the COVID-19 pandemic. A total of 137

participants completed the survey questionnaires for this study. Prior to conducting the

linear regression analysis, I tested the relevant assumptions. The outliers were identified,

eliminated, and substituted with the nearest acceptable values. The assumptions of

normality of residuals, independence, and multicollinearity were met. The results of the

regression analysis determined that variables of disruption, risk perception, and impact on

work life areas significantly predict the burnout scores. Therefore, there was sufficient

evidence to reject the null hypothesis, which stated that risk perception, disruption to

workflow, and impact on work life do not predict burnout in clinical psychologists who

practiced during the pandemic.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative, correlational survey study was to examine the factors that have contributed to burnout among psychologists during the COVID-19 pandemic in the United States. I conducted this study in order to gain new insight into the factors that have contributed to increased burnout in mental health professionals due to the pandemic. Survey questionnaires were used to operationalize the research variables of the study. The MBI-HSS was used to measure burnout, and the PEPS was used to measure the work-related impact of the COVID-19 pandemic. A total of 137 participants completed the survey questionnaires for this study.

The results of the regression analysis determined that the variables of disruption, risk perception, and impact on work life areas significantly predict the burnout scores among psychologists in the United States during the COVID-19 pandemic. The three predictors were able to explain 16.9% of the variance in the burnout scores of the psychologists who participated in the study. Among the three variables, the strongest predictor of burnout is the impact on work life areas. Therefore, there is sufficient evidence to reject the null hypothesis, which stated that risk perception, disruption to workflow, and impact on work life measured by the PEPS do not predict burnout as measured by the MBI-HSS in clinical psychologists who practiced during the pandemic. The results of the analysis also revealed that both resources and leadership did not significantly predict burnout among psychologists during the COVID-19 pandemic.

Therefore, I was not able to reject the null hypothesis regarding the predicted relationship between resources and leadership on burnout.

This chapter is a discussion of the findings. The findings are interpreted based on the extant literature and the framework of the study, which was Maslach's theory of burnout. The limitations of the findings are also discussed, followed by recommendations for future research. The theoretical, empirical, practical, and positive social change implications of the study are then outlined. Finally, the chapter ends with a conclusion highlighting the significance of the research findings.

Interpretation of the Findings

The main finding of this research study is that factors such as disruption, risk perception, and impact on work life areas significantly predict the burnout scores among psychologists in the United States during the COVID-19 pandemic. This finding is consistent with the assumption that healthcare workers who are working during the COVID-19 pandemic might have an increased risk of developing mental health problems and difficulties, particularly burnout (Khanal et al., 2020; Ornell et al., 2020). Burnout is a particular vulnerability and risk factor, given that many mental health professionals are already at risk of experiencing burnout, even outside the confines of working under the conditions of a pandemic (Khanal et al., 2020; Ornell et al., 2020).

The current research study showed that the strongest predictor of burnout among psychologists is the impact on work life areas. This finding is generally consistent with those of previous research linking the two variables in different configurations. For instance, Kotera et al. (2021) found that work-life balance served as a protector from

burnout among professional psychologists during the COVID-19 pandemic. Bae et al. (2020) also found that work-life balance among social work practitioners positively predicts compassion satisfaction, which then protects these professionals from experiencing burnout. Overall, the current research findings add to the existing body of literature supporting the relationship between work-life situation and burnout among psychologists.

The literature on disruption indicated that workplace-related disruptions can contribute to the burnout of employees (Evanoff et al., 2020; Müller, 2019). Disruptions can manifest in terms of changes in management/leadership or changes in working conditions (Evanoff et al., 2020; Müller, 2019). The COVID-19 pandemic is a particularly significant workplace disruption that has affected many work settings globally (Smallwood et al., 2022). The current research study is consistent with the general literature regarding the role of workplace disruption in burnout, with the study findings indicating that disruptions brought about by the COVID-19 pandemic also serve as a significant predictor of burnout among psychologists. Hence, the disruptive nature of the COVID-19 pandemic in the workplace potentially adds another layer of challenge among psychologists, making these mental health professionals even more at risk of experiencing burnout.

In terms of risk perception during the COVID-19 pandemic, previous scholars have indicated that risk perception among healthcare workers is associated with various mental health problems/challenges, such as experiences of depressive and insomniac symptoms (Bassetti et al., 2021; Lee et al., 2021). The negative effects of risk perception

on the well-being and mental functioning of individuals during the COVID-19 pandemic are particularly observed in the broader healthcare sector (Yin et al., 2021). For instance, Bailey et al. (2021) found that risk perception and burnout among physicians working during the COVID-19 pandemic are positively associated with each other. The current study adds to the body of literature indicating that risk perceptions predict burnout among psychologists working during the COVID-19 pandemic.

Maslach's theory of burnout was used as the theoretical framework for this research study. When one situates the research findings in relation to the study's framework, the results are consistent with the general principle that burnout is a complex phenomenon that can be predicted by different factors (Joshi & Sharma, 2020). Burnout is commonly related to mental health impairment as a result of various workplace issues (Wright & Caudill, 2020). The current findings provide additional empirical support for factors such as disruption, risk perception, and impact on work life areas predicting burnout among psychologists working during the COVID-19 pandemic.

Finally, both resources and leadership did not significantly predict burnout among psychologists during the COVID-19 pandemic. These findings are somewhat consistent with the current literature, with many scholars linking resources and leadership to burnout in terms of being protective factors as opposed to predictors of burnout. For instance, Kelly and Hearld (2020) found that leadership can alleviate burnout among behavioral healthcare workers. Lack of resources was also cited as a cause for burnout among psychologists during the pandemic (McMahon et al., 2020; Nimmawitt et al., 2020; Zhang et al., 2021). The consistency or alignment of the research findings to the

extant literature could be explained by the nature of the design and the intent of the

current research in terms of the configuration of the different variables. I examined

leadership and resources as potential predictors of burnout. Previous scholars, however,

have suggested that leadership and resources act more as protective factors that could

alleviate the experiences of burnout (Joshi & Sharma, 2020; Kelly & Hearld, 2020).

Limitations of the Study

One limitation of the study is that the nature of correlational research cannot lead

to cause-and-effect conclusions. Hence, I cannot make claims regarding whether factors

such as disruption, risk perception, and impact on work life areas influence the burnout of

psychologists during the COVID-19 pandemic. The current findings only indicate a

significant predictive relationship between the criterion of burnout and the predictors of

disruption, risk perception, and impact on work life areas.

Another potential limitation of the study is that burnout was measured in this

study as a composite construct. Based on Maslach's theory, burnout was described as a

state that occurs as a consequence of a prolonged difference between an individual and

the six work dimensions of workload, control, reward, community, fairness, and values. I

did not differentiate the six dimensions of burnout and their individual relationships with

the selected predictors such as disruption, risk perception, impact on work life areas,

resources, and leadership.

Another potential limitation of this research study is the large timeframe wherein

the study was contextualized, which was the COVID-19 pandemic. More specifically, the

pandemic started more than 1 year ago, which means that other non-pandemic-related

factors could have affected the survey responses of the participants. I anticipated that many psychologists might have already recovered from their burnout symptomology as a result of the large timeframe of the study. Moreover, the results of this research study may not be as applicable in different contexts.

Recommendations

One recommendation for further research is to expand the variables in the regression model in order to determine a broader scope of predictors of burnout among psychologists working during the COVID-19 pandemic. The current regression model only accounts for 16.9% of the variance in the burnout scores of the psychologists who participated in the study, which means that other factors have not been identified in this study. Expanding the number of variables in the model may lead to a greater understanding of the variance in the level of burnout among psychologists.

To address the limitation of operationalizing burnout as a composite variable as opposed to a multidimensional construct, future researchers could examine potential predictors of burnout while incorporating the different dimensions or components of burnout. Using the different components of burnout when examining its relationship with other variables can lead to a more precise understanding of the association of burnout with other variables. The same principle of using multidimensional constructs can also be used when selecting variables to test as potential predictors of burnout.

A strength of the current study is that it is possible to generalize the findings because of the large sample size used to statistically establish the relationships of variables. To further capitalize on the strength of this study, future scholars could delve

into the in-depth perceptions or lived experiences of psychologists working during the COVID-19 pandemic in order to understand their challenges and difficulties as mental health professionals during this time period. By conducting a more in-depth qualitative study to more thoroughly explore the lived experiences of psychologists, deeper insights that cannot be acquired from a simple statistical finding can be generated.

Implications

The implications of the study for positive social change include gaining deeper insight into the factors that contributed to increased burnout in mental health professionals due to the COVID-19 pandemic. Organizational policies within the mental health sector should be able to adjust to the needs of mental health professionals as a result of the additional challenges brought about by the pandemic. The results of this study could be instrumental in further expanding the support that psychologists and other mental health professionals receive during the COVID-19 pandemic.

A methodological implication of the study is that more advanced quantitative research designs need to be developed in order to further understand the predictors of burnout among psychologists during the COVID-19 pandemic. The current study was only correlational in nature, which—although it provided information about the predictive relationship of the variables—could still be further enhanced by utilizing experimental designs. Moreover, moderation or mediation analysis could further improve the findings of the current study.

The theoretical implication of this research is that burnout can be operationalized as a composite or a multidimensional construct. Burnout can be operationalized as a

three-dimensional construct, as reflected in Maslach's (1993) conceptualization of burnout through MBI-HSS. The instrument examines the three domains of burnout across three subscales of Emotional Exhaustion (EE), Depersonalization (DP), and low sense of Personal Accomplishment (PA). In the current study, Ioperationalized burnout as a single construct. How burnout is operationalized can influence how the results of a study are reported and presented.

The empirical implication of the current research is that the link between disruption, risk perception, and impact on work life areas and burnout among psychologists working during the COVID-19 pandemic has been established and confirmed. Previous scholars have already established the higher risk among mental health professionals to experience burnout because of the nature of their work where stress is common (Khanal et al., 2020; Ornell et al., 2020). The current study highlighted how the COVID-19 pandemic can further exacerbate the risk for psychologists and other mental health professionals to experience potentially more intense levels of burnout.

Based on the research findings that were presented, a recommendation to improve practice is to give further support for mental health professionals who are working during the COVID-19 pandemic. More specifically, factors such as work-life balance, minimizing workplace disruptions, and alleviating perceptions of risk could be encouraged in order to address potential burnout among practicing psychologists during the pandemic. These issues should be addressed by leaders or directors of mental health facilities in order to protect psychologists from burnout.

Another practical recommendation is to establish a formal support system for mental health professionals within the organization that could serve as a protective factor for burnout. A specific example of this support system is the practice of conducting regular meetings that allow practitioners to share each other's experiences and challenges. Another possibility would be the institution of colleague-based therapy that allows practitioners to become advocates for each other.

Conclusion

The purpose of this quantitative, correlational survey study was to examine the factors that contributed to burnout among psychologists during the COVID-19 pandemic in the United States. The results of the analysis revealed that factors such as disruption, risk perception, and impact on work life areas significantly predict the burnout scores among the sampled population. Among the three variables, the strongest predictor of burnout is the impact on work life areas. Both resources and leadership did not significantly predict the burnout of psychologists working during the pandemic. Overall, these findings highlight the increased vulnerability of psychologists to burnout during the COVID-19 pandemic.

Burnout is common among many mental health professionals (Barello et al., 2020; Di Tella et al., 2021; Rotenstein et al., 2018), and it has been worsened by the challenges brough about by the COVID-19 pandemic (Barello et al., 2020). The identification of disruption, risk perception, and impact of work life areas as predictors of burnout among psychologists working during the COVID-19 pandemic could equip organizational leaders of mental health facilities to make institutional policies to address

these potential risk factors. The results of this study extend the empirical support about the different factors that predict burnout among psychologists, with an emphasis on those practicing during the COVID-19 pandemic.

References

Adams, S. M., & Vanderhoef, D. M. (2021). The critical role of primary care providers in

meeting mental health care needs in 2021. *Journal for Nurse Practitioners*, *17*(1),

3–4. https://doi.org/10.1016/j.nurpra.2020.12.014

Akanle, O., Ademuson, A. O., & Shittu, O. S. (2020). Scope and limitation of study in

social research. In A. S. Jegede & U. C. Isiugo-Abanihe (Eds.), *Contemporary*

issues in social research (pp. 105–114). Ibadan University Press.

Ali, S. K., Shah, J., & Talib, Z. (2021). COVID-19 and mental well-being of nurses in a

tertiary facility in Kenya. *PloS ONE*, *16*(7), 1–28.

https://doi.org/10.1371/journal.pone.0254074

Al Mutair, A., Al Mutairi, A., Chagla, H., Alawam, K., Alsalman, K., & Ali, A. (2020).

Examining and adapting the psychometric properties of the Maslach Burnout

Inventory-Health Services Survey (MBI-HSS) among healthcare

professionals. *Applied Sciences*, *10*(5), 1890–1901.

https://doi.org/10.3390/app10051890

Alrawashdeh, H. M., Ala'a, B., Alzawahreh, M. K., Al-Tamimi, A., Elkholy, M., Al

Sarireh, F., & 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), 1–18. https://doi.org/10.1186/s12889-021-

10897-4

American Psychological Association Center for Workforce Studies. (2018). *Demographics of the U.S. psychology workforce: Findings from the 2007–16 American Community Survey.* National Center for Education Statistics.

Azoulay, E., De Waele, J., Ferrer, R., Staudinger, T., Borkowska, M., Povoa, P., Iliopoulou, K., Artigas, A., Schaller, S. J., Hari, M. S., Pellegrini, M., Darmon, M., Kesecioglu, J., & Cecconi, M. (2020). Symptoms of burnout in intensive care unit specialists facing the COVID-19 outbreak. *Annals of Intensive Care*, *10*(1), 1–8. https://doi.org/10.1186/s13613-020-00722-3

Bae, J., Jennings, P. F., Hardeman, C. P., Kim, E., Lee, M., Littleton, T., & Saasa, S. (2020). Compassion satisfaction among social work practitioners: The role of work–life balance. *Journal of Social Service Research*, *46*(3), 320–330. https://doi.org/10.1080/01488376.2019.1566195

Bailey, J. G., Wong, M., Bailey, K., Banfield, J. C., Barry, G., Munro, A., Kirkland, S., & Leiter, M. (2021). Pandemic-related factors predicting physician burnout beyond established organizational factors: Cross-sectional results from the COPING survey. *Psychology, Health & Medicine*, 1–15. https://doi.org/10.1080/13548506.2021.1990366

Barello, S., Palamenghi, L., & Graffigna, G. (2020). Burnout and somatic symptoms among frontline healthcare professionals at the peak of the Italian COVID-19 pandemic. *Psychiatry Research*, *290*, 113–29. https://doi.org/10.1016/j.psychres.2020.113129

Bassetti, N., Parente, S., Topa, P., Brondino, N., Damiani, S., Politi, P., & Olivola, M.

    (2021). Distress and burnout among psychiatrists during the COVID-19

    pandemic. *European Psychiatry*, *64*(S1), S307–S308.

    https://doi.org/10.3389/fpsyt.2021.784131/full

Bettinsoli, M. L., Di Riso, D., Napier, J. L., Moretti, L., Bettinsoli, P., Delmedico, M.,

    Piazzola, A., & Moretti, B. (2020). Psychological impact and contextual factors

    associated with physical and mental health conditions of Italian healthcare

    professionals during the COVID-19 disease outbreak. *PsyArXiv Preprints*, *9*(2),

    1–22. https://doi.org/10.31234/osf.io/w89fz

Blanco-Donoso, L. M., Garrosa, E., Moreno-Jiménez, J., Gálvez-Herrer, M., & Moreno-

    Jiménez, B. (2020). Occupational psychosocial risks of health professionals in the

    face of the crisis produced by the COVID-19: From the identification of these

    risks to immediate action. *International Journal of Nursing Studies*

    Advances, *2*(12), 1–8. https://doi.org/10.1016/j.ijnsa.2020.100003

Boumans, N. P., & Dorant, E. (2021). The relationships of job and family demands and

    job and family resources with family caregivers' strain. *Scandinavian Journal of*

    Caring Sciences, *35*(2), 567–576. https://doi.org/10.1111/scs.12873

Brady, K. J., Ni, P., Sheldrick, R. C., Trockel, M. T., Shanafelt, T. D., Rowe, S. G., &
Kazis, L. E. (2020). Describing the emotional exhaustion, depersonalization, and
low personal accomplishment symptoms associated with Maslach Burnout
Inventory subscale scores in U.S. physicians: An item response theory
analysis. *Journal of Patient-Reported Outcomes*, *4*(1), 1–14.
https://doi.org/10.1186/s41687-020-00204-x

Braquehais, M. D., Vargas-Cáceres, S., Gómez-Durán, E., Nieva, G., Valero, S., Casas,
M., & Bruguera, E. (2020). The impact of the COVID-19 pandemic on the mental
health of healthcare professionals. *QJM: An International Journal of
Medicine*, *113*(9), 613–617. https://academic.oup.com/qjmed

Bruyneel, A., Smith, P., Tack, J., & Pirson, M. (2021). Prevalence of burnout risk and
factors associated with burnout risk among ICU nurses during the COVID-19
outbreak in French-speaking Belgium. *Intensive and Critical Care Nursing*, *65*,
103–119. https://doi.org/10.1016/j.iccn.2021.103059

Cavanaugh, A. M., Fortier, S., Lewis, P., Arora, V., Johnson, M., George, K., Tobias, J.,
Lunn, S., Miller, T., Thoroughman, D., & Spicer, K. B. (2021). COVID-19
outbreak associated with a SARS-CoV-2 R. 1 lineage variant in a skilled nursing
facility after vaccination program—Kentucky, March 2021. *Morbidity and
Mortality Weekly Report*, *70*(17), 639–645.
https://doi.org/10.15585%2Fmmwr.mm7017e2

Chatterjee, S. S., Bhattacharyya, R., Bhattacharyya, S., Gupta, S., Das, S., & Banerjee,

    B. B. (2020). Attitude, practice, behavior, and mental health impact of COVID-

    19 on doctors. *Indian Journal of Psychiatry*, *62*(3), 257–289.

    https://doi.org/10.4103%2Fpsychiatry.IndianJPsychiatry_333_20

Cheng, W., Zhang, F., Liu, Z., Zhang, H., Lyu, Y., Xu, H., Hua, Y., Gu, J., Yang, Z., &

    Liu, J. (2020). A psychological health support scheme for medical teams in

    COVID-19 outbreak and its effectiveness. *General Psychiatry*, *33*(5), 1–12.

    https://doi.org/10.1136/gpsych-2020-100288

Clough, B. A., Hill, M., Delaney, M., & Casey, L. M. (2020). Development of a measure

    of stigma towards occupational stress for mental health professionals. *Social*

    Psychiatry and Psychiatric Epidemiology, *55*(7), 941–951.

    https://doi.org/10.1007/s00127-019-01820-9

Dhusia, A. H., Dhaimade, P. A., Jain, A. A., Shemna, S. S., & Dubey, P. N. (2019).

    Prevalence of occupational burnout among resident doctors working in public

    sector hospitals in Mumbai. *Indian Journal of Community Medicine: Official*

    Publication of Indian Association of Preventive & Social Medicine, *44*(4), 352–

    365. https://doi.org/10.4103/ijcm.ijcm_78_19

Ding, J., Liu, C., & Kandonga, G. A. (2020). Exploring the limitations of the h-index and

    h-type indexes in measuring the research performance of authors. *Scientometrics*,

    122(3), 1303–1322. https://doi.org/10.1007/s11192-020-03364-1

Dinibutun, S. R. (2020). Factors associated with burnout among physicians: An

evaluation during a period of COVID-19 pandemic. *Journal of Healthcare*

Leadership, *12*(1), 85–101. https://doi.org/10.2147/JHL.S270440

Di Tella, M., Romeo, A., Benfante, A., & Castelli, L. (2021). Psychological distress

among Italian university students compared to general workers during the

COVID-19 pandemic. *International Journal of Environmental Research and*

Public Health, *18*(5), 2503. https://doi.org/10.3390/ijerph18052503

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.

https://doi.org/10.1001/jama.2018.12615

Dyrbye, L. N., Burke, S. E., Hardeman, R. R., Herrin, J., Wittlin, N. M., Yeazel, M., &

Van Ryn, M. (2018). Association of clinical specialty with symptoms of burnout

and career choice regret among U.S. resident physicians. *Journal of the American*

Medical Association, *320*(11), 1114–1130.

https://doi.org/10.1001/jama.2018.12615

Elbarazi, I., Loney, T., Yousef, S., & Elias, A. (2017). Prevalence of and factors

associated with burnout among health care professionals in Arab countries: A

systematic review. *BMC Health Services Research*, *17*(1), 1–10.

https://doi.org/10.1186/s12913-017-2319-8

Ellis, T., & Levy, Y. (2008). Framework of problem-based research: A guide for novice

    researchers on the development of a research-worthy problem. *Informing Science,*

    11. https://doi.org/10.28945/438

Endriulaitienė, A., Žardeckaitė-Matulaitienė, K., Pranckevičienė, A., Markšaitytė, R.,

    Tillman, D. R., & Hof, D. D. (2019). Self-stigma of seeking help and job burnout

    in mental health care providers: The comparative study of Lithuanian and the

    USA samples. *Journal of Workplace Behavioral Health, 34*(2), 129–48.

    https://doi.org/10.1080/15555240.2019.1586549

Evanoff, B. A., Strickland, J. R., Dale, A. M., Hayibor, L., Page, E., Duncan, J. G.,

    Kannampallil, T., & Gray, D. L. (2020). Work-related and personal factors

    associated with mental well-being during the COVID-19 response: Survey of

    health care and other workers. *Journal of Medical Internet Research*, *22*(8),

    e21366. https://doi.org/10.2196/21366

Field, A. (2013). *Discovering statistics using IBM SPSS Statistics*. SAGE.

Fouka, G., & Mantzorou, M. (2011). What are the major ethical issues in conducting

    research? Is there a conflict between the research ethics and the nature of nursing?

    Health Science Journal, 5(1), 3–14. https://www.hsj.gr/

Fujioka, J. K., Mirza, R. M., McDonald, P. L., & Klinger, C. A. (2018). Implementation

    of medical assistance in dying: A scoping review of health care providers'

    perspectives. *Journal of Pain and Symptom Management*, *55*(6), 1564–1576.

    https://doi.org/10.1016/j.jpainsymman.2018.02.011

Ghanayem, M., Srulovici, E., & Zlotnick, C. (2020). Occupational strain and job

   satisfaction: The job demand–resource moderation–mediation model in

   hemodialysis units. *Journal of Nursing Management*, *28*(3), 664–672.

   https://doi.org/10.1111/jonm.12973

Gravetter, F. J., & Forzano, L.-A. B. (2018). *Research methods for the behavioral*

   sciences (6th ed.). Cengage Learning.

Guenette, J. P., & Smith, S. E. (2018). Burnout: Job resources and job demands

   associated with low personal accomplishment in United States radiology

   residents. *Academic Radiology*, *25*(6), 739–743.

   https://doi.org/10.1097/njh.0000000000000349

Győrffy, Z., Dweik, D., & Girasek, E. (2016). Workload, mental health and burnout

   indicators among female physicians. *Human Resources for Health*, *14*(1), 1–10.

   https://doi.org/10.1186/s12960-016-0108-9

Harris, B., & Plucker, J. (2014). Achieving equity and excellence: The role of school

   mental health providers in shrinking excellence gaps. *Gifted Child Today*, *37*(2),

   111–118. https://doi.org/10.1177/1076217514520967

Heeter, C., Lehto, R., Allbritton, M., Day, T., & Wiseman, M. (2017). Effects of a

   technology-assisted meditation program on healthcare providers' interoceptive

   awareness, compassion fatigue, and burnout. *Journal of Hospice & Palliative*

   Nursing, *19*(4), 314–322. https://doi.org/10.1097/njh.0000000000000349

Hewitt, D. B., Ellis, R. J., Hu, Y. Y., Cheung, E. O., Moskowitz, J. T., Agarwal, G., &

    Bilimoria, K. Y. (2020). Evaluating the association of multiple burnout definitions

    and thresholds with prevalence and outcomes. *JAMA Surgery*, *155*(11), 1043–

    1049. https://doi.org/10.1001/jamasurg.2020.3351

Hu, Y., & Plonsky, L. (2021). Statistical assumptions in L2 research: A systematic

    review. *Second Language Research*, *37*(1), 171–184.

    https://doi.org/10.1177/0267658319877433

Hwang, H., Hur, W. M., & Shin, Y. (2021). Emotional exhaustion among the South

    Korean workforce before and after COVID-19. *Psychology and Psychotherapy:*

    Theory, Research and Practice, *94*(2), 371–381.

    https://doi.org/10.1111/papt.12309

Isautier, J. M., Copp, T., Ayre, J., Cvejic, E., Meyerowitz-Katz, G., Batcup, C., Bonner,

    C., Dodd, R., Nickel, B., Pickels, K., Cornell, S., Dakin, T., & McCaffrey, K. J.

    (2020). People's experiences and satisfaction with telehealth during the COVID-

    19 pandemic in Australia: Cross-sectional survey study. *Journal of Medical*

    Internet Research, 22(12), e24531. https://doi.org/10.2196/24531

Izakova, L., Breznoscakova, D., Jandova, K., Valkucakova, V., Bezakova, G., &

    Suvada, J. (2020). What mental health experts in Slovakia are learning from

    COVID-19 pandemic? *Indian Journal of Psychiatry, 62*(3), s459–s466.

    https://doi.org/10.4103/psychiatry.IndianJPsychiatry_758_20

Johnson, A. R., Jayappa, R., James, M., Kulnu, A., Kovayil, R., & Joseph, B. (2020). Do low self-esteem and high stress lead to burnout among healthcare workers? Evidence from a tertiary hospital in Bangalore, India. *Safety and Health at Work*, *11*(3), 347–352. https://doi.org/10.1016/j.shaw.2020.05.009

Johnson, J., Corker, C., & O'Connor, D. B. (2020). Burnout in psychological therapists: A cross-sectional study investigating the role of supervisory relationship quality. *Clinical Psychologist*, *24*(3), 223–235. https://doi.org/10.1111/cp.12206

Joshi, G., & Sharma, G. (2020). Burnout: A risk factor amongst mental health professionals during COVID-19. *Asian Journal of Psychiatry*, *54*, 102300–102306. https://doi.org/10.1016/j.ajp.2020.102300

Kannampallil, T. G., Goss, C. W., Evanoff, B. A., Strickland, J. R., McAlister, R. P., & Duncan, J. (2020). Exposure to COVID-19 patients increases physician trainee stress and burnout. *PloS ONE*, *15*(8), 237301–237309. https://doi.org/10.1371/journal.pone.0237301

Kelly, R. J., & Hearld, L. R. (2020). Burnout and leadership style in behavioral health care: A literature review. *Journal of Behavioral Health Services & Research*, *47*(4), 581–600. https://doi.org/10.1007/s11414-019-09679-z

Kerlinger, F. N., & Lee, H. B. (Eds.). (2000). *Foundations of behavioral research.* Harcourt College Publishers.

Khan, K. S., Mamun, M. A., Griffiths, M. D., & Ullah, I. (2020). The mental health impact of the COVID-19 pandemic across different cohorts. *International Journal of Mental Health and Addiction, 2*(9), 1–7. https://doi.org/10.1007/s11469-020-00367-0

Khanal, P., Devkota, N., Dahal, M., Paudel, K., & Joshi, D. (2020). Mental health impacts among health workers during COVID-19 in a low resource setting: A cross-sectional survey from Nepal. *Globalization and Health*, *16*(1), 1–12. https://doi.org/10.1037/pro0000182

Klein, A., Taieb, O., Xavier, S., Baubet, T., & Reyre, A. (2020). The benefits of mindfulness-based interventions on burnout among health professionals: A systematic review. *Explore*, *16*(1), 35–43. https://doi.org/10.1016/j.explore.2019.09.002

Koeske, G. F., & Koeske, R. D. (1993). A preliminary test of a stress-strain-outcome model for reconceptualizing the burnout phenomenon. *Journal of Social Service Research*, *17*(3–4), 107–135. https://doi.org/10.1300/j079v17n03_06

Kohlhoff, J., Cibralic, S., Tooke, S., Hickinbotham, R., Knox, C., Roach, V., & Barnett, B. (2021). Health professional perspectives on an antenatal mental health screening program in a private hospital. *Australian and New Zealand Journal of Obstetrics and Gynaecology, 61*(6), 891–97. https://doi.org/10.1111/ajo.13394

Kotera, Y., Maxwell-Jones, R., Edwards, A. M., & Knutton, N. (2021). Burnout in professional psychotherapists: Relationships with self-compassion, work–life balance, and telepressure. *International Journal of Environmental Research and Public Health*, *18*(10), 5308. https://doi.org/10.3390/ijerph18105308

Labrague, L. J., & de Los Santos, J. A. A. (2021). Fear of COVID-19, psychological distress, work satisfaction and turnover intention among frontline nurses. *Journal of Nursing Management*, *29*(3), 395–403. https://doi.org/10.1111/jonm.13168

Lebares, C. C., Braun, H. J., Guvva, E. V., Epel, E. S., & Hecht, F. M. (2018). Burnout and gender in surgical training: A call to re-evaluate coping and dysfunction. *American Journal of Surgery*, *216*(4), 800–804. https://doi.org/10.1016/j.amjsurg.2018.07.058

Lee, J., Lee, H. J., Hong, Y., Shin, Y. W., Chung, S., & Park, J. (2021). Risk perception, unhealthy behavior, and anxiety due to viral epidemic among healthcare workers: The relationships with depressive and insomnia symptoms during COVID-19. *Frontiers in Psychiatry*, *12*, 358. https://doi.org/10.3389/fpsyt.2021.615387

Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, *81*(2), 123. https://doi.org/10.1037/0021-9010.81.2.123

Lim, N., Kim, E. K., Kim, H., Yang, E., & Lee, S. M. (2010). Individual and work-related factors influencing burnout of mental health professionals: A meta-analysis. *Journal of Employment Counseling*, *47*(2), 86–96. https://doi.org/10.1002/j.2161-1920.2010.tb00093.x

Lim, W. Y., Ong, J., Ong, S., Hao, Y., Abdullah, H. R., Koh, D. L., & Mok, U. S. M. (2020). The abbreviated Maslach burnout inventory can overestimate burnout: A study of anesthesiology residents. *Journal of Clinical Medicine*, *9*(1), 61–101. https://doi.org/10.3390/jcm9010061

Luther, L., Gearhart, T., Fukui, S., Morse, G., Rollins, A. L., & Salyers, M. P. (2017). Working overtime in community mental health: Associations with clinician burnout and perceived quality of care. *Psychiatric Rehabilitation Journal, 40*(2), 252. https://psycnet.apa.org/record/2016-52088-001-259

Maslach, C. (1993). Burnout: A multidimensional perspective. In *Professional burnout*. Routledge.

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

McCade, D., Frewen, A., & Fassnacht, D. B. (2021). Burnout and depression in Australian psychologists: The moderating role of self-compassion. *Australian Psychologist*, *56*(2), 111–122. https://doi.org/10.1080/00050067.2021.1890979

McCormack, H. M., MacIntyre, T. E., O'Shea, D., Herring, M. P., & Campbell, M. J. (2018). The prevalence and cause(s) of burnout among applied psychologists: A systematic review. *Frontiers in Psychology*, *9*, 1897. https://doi.org/10.3389/fpsyg.2018.01897

McMahon, D. E., Peters, G. A., Ivers, L. C., & Freeman, E. E. (2020). Global resource

    shortages during COVID-19: Bad news for low-income countries. *PLoS*

    Neglected Tropical Diseases, *14*(7), 8412–20.

    https://doi.org/10.1371/journal.pntd.0008412

Miguel-Puga, J. A., Cooper-Bribiesca, D., Avelar-Garnica, F. J., Sanchez-Hurtado, L. A.,

    Colin-Martínez, T., Espinosa-Poblano, E., & Jáuregui-Renaud, K. (2021).

    Burnout, depersonalization, and anxiety contribute to posttraumatic stress in

    frontline health workers at COVID-19 patient care: A follow-up study. *Brain and*

    Behavior, *11*(3), 2007–2010. https://doi.org/10.1002/brb3.2007

Mind Garden. (2020). *Pandemic Experiences & Perceptions Survey.*

    https://www.mindgarden.com/346-pandemic-experiences-perceptions-survey

Mitake, T., Iwasaki, S., Deguchi, Y., Nitta, T., Nogi, Y., Kadowaki, A., & Inoue, K.

    (2019). Relationship between burnout and mental-illness-related stigma among

    nonprofessional occupational mental health staff. *BioMed Research Information,*

    3(12), 1–19. https://doi.org/10.1155/2019/5921703

Morgantini, L. A., Naha, U., Wang, H., Francavilla, S., Acar, Ö., Flores, J. M.,

    Crivellaro, S., Moreira, D., Abern, M., Eklund, M., Vigneswaran, H. T., & Weine,

    S. M. (2020). Factors contributing to healthcare professional burnout during the

    COVID-19 pandemic: A rapid turnaround global survey. *PloS ONE, 15*(9),

    e0238217. https://doi.org/10.1371/journal.pone.0238217

Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health and Mental Health Services Research*, *39*(5), 341–352. https://doi.org/10.1007/s10488-011-0352-1

Mukhtar, S. (2020). Psychological health during the coronavirus disease 2019 pandemic outbreak. *International Journal of Social Psychiatry*, *66*(5), 512–516. https://doi.org/10.1177/0020764020925835

Müller, M. (2019). What are existential disruptions in managerial practice? Overcoming disruptions as preventions of burnout. In *Proceedings of the Knowledge on Economics and Management: Profit or Purpose Conference* (pp. 181–187).

Nimmawitt, N., Wannarit, K., & Pariwatcharakul, P. (2020). Thai psychiatrists and burnout: A national survey. *PloS ONE*, *15*(4), e0230204. https://doi.org/10.1371/journal.pone.0230204

O'Connor, K., Neff, D. M., & Pitman, S. (2018). Burnout in mental health professionals: A systematic review and meta-analysis of prevalence and determinants. *European Psychiatry*, *53*(1), 74–99. https://doi.org/10.1016/j.eurpsy.2018.06.003

Ornell, F., Halpern, S. C., Kessler, F. H. P., & Narvaez, J. C. D. M. (2020). The impact of the COVID-19 pandemic on the mental health of healthcare professionals. *Cadernos de Saude Publica*, *36*, e00063520. https://doi.org/10.1590/0102-311x00063520

Panagioti, M., Geraghty, K., & Johnson, J. (2018). How to prevent burnout in

    cardiologists? A review of the current evidence, gaps, and future

    directions. *Trends in Cardiovascular Medicine*, *28*(1), 1–7.

    https://doi.org/10.1001/2018.3713

Pearman, A., Hughes, M. L., Smith, E. L., & Neupert, S. D. (2020). Mental health

    challenges of United States healthcare professionals during COVID-19. *Frontiers*

    in Psychology, *11*(1), 9–29. https://doi.org/10.3389/fpsyg.2020.02065

Pehlivanoğlu, M. Ç., & Civelek, M. E. (2019). The effects of emotional exhaustion and

    depersonalization on personal accomplishment in pharmaceutical industry. *OPUS*

    Uluslararası Toplum Araştırmaları Dergisi, *11*(18), 2071–86.

    https://doi.org/10.26466/opus.566917

Practice Research and Policy Staff (2018). *Research roundup: Burnout in mental health*

    providers. https://www.apaservices.org. Retrieved July 20, 2022, from

    https://www.apaservices.org/practice/update/2018/01-25/mental-health-providers

Rokach, A., & Boulazreg, S. (2020). The COVID-19 era: How therapists can diminish

    burnout symptoms through self-care. *Current Psychology*, Ahead of print.

    https://doi.org/10.1007/s12144-020-01149-6

Rossi, R., Socci, V., Talevi, D., Mensi, S., Niolu, C., Pacitti, F., & Di Lorenzo, G.

    (2020). COVID-19 pandemic and lockdown measures impact on mental health

    among the general population in Italy. *Frontiers in Psychiatry*, *11*, 790–803.

    https://doi.org/10.3389/fpsyt.2020.00790

Rossler, W. (2014). Depression und burnout. *Praxis, 103*(18), 1067–70.

https://doi.org/10.1024/1661-8157/a001776

Rotenstein, L. S., Torre, M., Ramos, M. A., Rosales, R. C., Guille, C., Sen, S., & Mata,

D. A. (2018). Prevalence of burnout among physicians: A systematic

review. *Journal of the American Medical Association*, *320*(11), 1131–1150.

https://doi.org/10.1001/jama.2018.12777

Ruiz-Fernández, M. D., Ramos-Richardo, J. D., Ibanez-Masero, O., Cabrera-Troya, J.,

Carmona-Rega, M. I., & Ortega-Galan, A. M. (2020). Compassion fatigue,

burnout, compassion satisfaction and perceived stress in healthcare professionals

during the COVID-19 health crisis in Spain. *Journal of Clinical Nursing, 29*(21–

22), 4321–30. https://doi.org/10.1111/jocn.15469

Sandheimer, C., Hedenrud, T., Hensing, G., & Holmgren, K. (2020). Effects of a work

stress intervention on healthcare use and treatment compared to treatment as

usual: A randomised controlled trial in Swedish primary healthcare. *BMC Family

Practice*, *21*(1), 1–10. https://doi.org/10.1186/s12875-020-01210-0

Sarwar, F., Panatik, S. A., Sukor, M. S. M., & Rusbadrol, N. (2021). A job demand–

resource model of satisfaction with work-family balance among academic faculty:

Mediating roles of psychological capital, work-to-family conflict, and enrichment.

SAGE Open, *11*(2), 21582440211006142.

https://doi.org/10.1177/21582440211006142

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: Appropriate

    use and interpretation. *Anesthesia and Analgesia, 126*(5), 1763–68.

    https://doi.org/10.1213/ANE.0000000000002864

Simionato, G. K., & Simpson, S. (2018). Personal risk factors associated with burnout

    among psychotherapists: A systematic review of the literature. *Journal of Clinical*

    Psychology, *74*(9), 1431–1456. https://doi.org/10.1002/jclp.22615

Simpson, S., Simionato, G., & Smout, M. (2020). Burnout amongst clinical and

    counselling psychologists: The role of early maladaptive. *Science and*

    Medicine, *64*(4), 830–841. https://doi.org/10.1002/cpp.2328

Smallwood, N., Harrex, W., Rees, M., Willis, K., & Bennett, C. M. (2022). COVID-19

    infection and the broader impacts of the pandemic on healthcare

    workers. *Respirology, 27*, 411–426. https://doi.org/10.1111/resp.14208

Stuijfzand, S., Deforges, C., Sandoz, V., Sajin, C. T., Jaques, C., Elmers, J., & Horsch, A.

    (2020). Psychological impact of an epidemic/pandemic on the mental health of

    healthcare professionals: A rapid review. *BMC Public Health*, *20*(1), 1–18.

    https://doi.org/10.1186/s12889-020-09322-z

Talaee, N., Varahram, M., Jamaati, H., Salimi, A., Attarchi, M., Kazempour Dizaji, M.,

    & Seyedmehdi, S. M. (2020). Stress and burnout in health care workers during

    COVID-19 pandemic: Validation of a questionnaire. *Journal of Public Health*,

    2(3), 1–6. https://doi.org/10.1007/s10389-020-01313-z

Tavares, K. F. A., Souza, N. V. D. D. O., Silva, L. D. D., & Kestenberg, C. C. F. (2014). Prevalence of burnout syndrome among resident nurses. *Acta Paulista de Enfermagem*, *27*, 260–265. https://doi.org/10.1590/1982-0194201400044

Tokac, U., & Razon, S. (2021). Nursing professionals' mental well-being and workplace impairment during the COVID-19 crisis: A network analysis. *Journal of Nursing Management, 1*(3), 1155. https://doi.org/10.1111/jonm.13285

Towey-Swift, K., & Whittington, R. (2021). Person-job congruence, compassion and recovery attitude in Community Mental Health Teams. *Journal of Mental Health*, *30*(4), 431–439. https://doi.org/10.1080/09638237.2019.1608931

Tsamakis, K., Rizos, E., Manolis, A. J., Chaidou, S., Kympouropoulos, S., Spartalis, E., & Triantafyllis, A. S. (2020). [Comment] COVID-19 pandemic and its impact on mental health of healthcare professionals. *Experimental and Therapeutic Medicine*, *19*(6), 3451–3453. https://doi.org/10.3892/etm.2020.8646

Warchol-Biedermann, K., Daroszewski, P., Bączyk, G., Greberski, K., Bugajski, P., Karoń, J., & Samborski, W. (2021). Dysfunctional coping mediates the relationship between stress and mental health in health care staff working amid COVID-19 pandemic. *Medical Principles and Practice, 30*, 395–400. https://doi.org/10.1159/000516181

West, C. P., Dyrbye, L. N., & Shanafelt, T. D. (2018). Physician burnout: Contributors, consequences and solutions. *Journal of Internal Medicine*, *283*(6), 516–529. https://doi.org/10.1111/joim.12752

Whaibeh, E., Mahmoud, H., & Naal, H. (2020). Telemental health in the context of a

    pandemic: The COVID-19 experience. *Current Treatment Options in*

    Psychiatry, *7*(2), 198–202. https://doi.org/10.1007/s40501-020-00210-2

Williamson, K., Lank, P. M., Cheema, N., Hartman, N., Lovell, E. O., & Emergency

    Medicine Education Research Alliance. (2018). Comparing the Maslach Burnout

    Inventory to other well-being instruments in emergency medicine

    residents. *Journal of Graduate Medical Education*, *10*(5), 532–536.

    https://doi.org/10.4300/jgme-d-18-00155.1

Wright, J. H., & Caudill, R. (2020). Remote treatment delivery in response to the

    COVID-19 pandemic. *Psychotherapy and Psychosomatics*, *89*(3), 1.

    https://doi.org/10.1159/000516181

Yang, S., Kwak, S. G., Ko, E. J., & Chang, M. C. (2020). The mental health burden of

    the COVID-19 pandemic on physical therapists. *International Journal of*

    Environmental Research and Public Health, *17*(10), 3723.

    https://doi.org/10.3390/ijerph17103723

Yin, Q., Chen, A., Song, X., Deng, G., & Dong, W. (2021). Risk perception and PTSD

    symptoms of medical staff combating against COVID-19: A PLS structural

    equation model. *Frontiers in Psychiatry*, *12*, 39.

    https://doi.org/10.3389/fpsyt.2021.607612

Zalewski, M., Walton, C. J., Rizvi, S. L., White, A. W., Gamache Martin, C., O'Brien, J. R., & Dimeff, L. (2021). Lessons learned conducting dialectical behavior therapy via telehealth in the age of COVID-19. *Cognitive and Behavioral Practice, 28*(4), 573–87. https://doi.org/10.1016/j.cbpra.2021.02.005

Zhang, L., Chai, L., Zhao, Y., Wang, L., Sun, W., Lu, L., Lu, H., & Zhang, J. (2021). Burnout in nurses during the COVID-19 pandemic in China: New challenges for public health. *Bioscience Trends, 15*(2), 129–31. https://doi.org/10.5582/bst.2021.01099

Appendix A: Pandemic Experiences and Perceptions Survey Sample

Questions & Permission

mind garden

www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Pandemic Experiences and Perceptions Survey (PEPS)

The seven sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Sample Items:

- To what extent has the pandemic affected the work of your organization?
- Please rate the adequacy of support staff availability.
- Please indicate to what extent did your training, equipment, and support provide you with control over your contact with the virus?
- How dangerous to you personally was the virus during the pandemic period?
- I felt a sense of social support with my work group.
- My immediate supervisor identified specific actions that would improve our capabilities.
- What would help you do your job right now?

Citation of the instrument must include the applicable copyright statement listed below.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix B: Permission to Use the Maslach Burnout Inventory—Health Services Survey

With Inventory Sample Items

m nd garden
www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Maslach Burnout Inventory forms: Human Services Survey, Human Services Survey for Medical Personnel, Educators Survey, General Survey, or General Survey for Students.

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument form may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below. Sample Items:

MBI - Human Services Survey - MBI-HSS:
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some recipients.

Copyright ©1981 Christina Maslach & Susan E. Jackson. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com

MBI - Human Services Survey for Medical Personnel - MBI-HSS (MP):
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some patients.

Copyright ©1981, 2016 by Christina Maslach & Susan E. Jackson. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com

MBI - Educators Survey - MBI-ES:
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some students.

Copyright ©1986 Christina Maslach, Susan E. Jackson & Richard L. Schwab. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com

MBI - General Survey - MBI-GS:

I feel emotionally drained from my work.
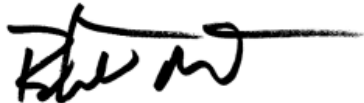In my opinion, I am good at my job.
I doubt the significance of my work.

MBI - General Survey for Students - MBI-GS (S):

I feel emotionally drained by my studies.
In my opinion, I am a good student.
I doubt the significance of my studies.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com