5-1-2023

RELATIONSHIP BETWEEN REHABILITATION COUNSELORS' EXPERIENCES, BURNOUT, AND PROFESSIONAL COLLABORATION DURING THE COVID-19 PANDEMIC

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by

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A Dissertation
Submitted in Partial Fulfillment of the Requirements for the
Doctor of Philosophy Degree

School of Health Sciences
in the Graduate School
Southern Illinois University Carbondale
May 2023

DISSERTATION APPROVAL

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A Dissertation Submitted in Partial

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for the Degree of

Doctor of Philosophy

in the field of Rehabilitation

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March 31, 2023

AN ABSTRACT OF THE DISSERTATION OF

Sharika L. Sproling, for the Doctor of Philosophy degree in Rehabilitation, presented on March 31, 2023, at Southern Illinois University Carbondale.

TITLE: RELATIONSHIP BETWEEN REHABILITATION COUNSELORS' EXPERIENCES, BURNOUT, AND PROFESSIONAL COLLABORATION DURING THE COVID-19 PANDEMIC

MAJOR PROFESSOR: Dr. Thomas Upton

The purpose of this quantitative study is to explore the relationships between rehabilitation counselors' experiences, burnout, and professional collaboration during the COVID-19 pandemic. These counselors represent an understudied population at risk of burnout, especially regarding its relationship to collaboration. Prior research has established how burnout can occur at the individual and organizational levels, and those who provide direct care have a greater risk (Salvador et al., 2021), which might be reduced by interprofessional collaboration (Collin et al., 2015).

The findings contribute to the existing literature related to direct care, work-related burnout, and the influence of collaboration. Work-related burnout measures included the Maslach Burnout Inventory–Human Services Survey (Maslach & Jackson, 1981), and for collaboration the Assessment of Interprofessional Team Collaboration Scale (Orchard et al., 2012. Participants consisted of certified rehabilitation professionals that provided direct services during the COVID-19 pandemic. A convenience sample was used to select participants, and data were collected through an online survey. Data analysis included descriptive statistics and correlation and multiple regression.

DEDICATION

This dissertation is dedicated to my grandmother, Minnie Mae Watson. Grandma, I dedicate this dissertation to you because of you, there would be no me. Words can't express how I wish you were still here today to celebrate this joyous achievement with me, but I know that you were with me along this journey in spirit. I also dedicate this dissertation to my sister, Marsha Sproling. I admire her strength and how she continues to keep pushing forward despite any obstacles that come her way. I also dedicate this dissertation to my parents, Minnie and Marshall Sproling, I thank Minnie Sproling for her 3:00 am phone calls to make sure that I am safe as I traveled to Carbondale from Arkansas to complete my coursework. My niece, Shamari Burnett and nephews, Jamarian Lee and Elijah Burnett. You all give me strength to create a legacy for you and I love you. Lastly, I dedicate this journey to myself. My faith, strength, and determination are not unnoticed by myself. I have dedicated and sacrificed so many areas of my life for this moment.

ACKNOWLEDGEMENTS

First and foremost, I would have to give all honor to God for every hurdle that I have endured to allow this process to begin. It has been such a great honor to have the assistance, guidance, and expertise of so many that have grown to be part of my tribe. I am grateful for Dr. Scott Gilbert for always being calm spirited and just allowing himself to be a source of light. He has such a calming spirit that any student would be grateful to embrace, and he allowed himself to be there for me and I will forever be grateful for his guidance. Dr. Sharon Davis, you are my rock! I must admit that even in graduate school, you encouraged and pushed me outside of my comfort zone. I remember when you first introduced me to the idea of obtaining a PhD, and I laughed because I knew that I was exhausted while obtaining my master's and I am appreciative of your ability to serve on my committee.

Dr. Thomas Upton, I thank you for your check-ins. Special thanks to Dr. Pender to and Dr. Redner for being part of my dissertation committee without hesitation. I would also wish to extend a special thank you to Dr. McGregor and Dr. Asher Pimpleton. Thank you both for believing in me since graduate school and without hesitation offering prayers, guidance, and knowledge. I must admit that I have always had such admiration to see women that look like me, extend a hand as an effort to promote students such as myself to push themselves towards their goals. Words cannot express my gratitude. I would love to extend a special note of thanks to Thaninny Mohanna Alhamad. I would also love to extend a special thanks to Darrell Davis for your support. Lynn James for being a great listener and being able to assist me by allowing me to have a safe place to express my emotions.

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CHAPTER 1

INTRODUCTION

Since 2020, the COVID-19 pandemic has contributed to numerous life-altering changes around the world, especially in healthcare. The greater reliance and burden on direct care workers has highlighted how important they are. These rehabilitation counselors provide much-needed care to their clientele in the face of labor reductions, illness, and limits to how services can be provided. A major problem in this field is work-related burnout which has been associated with the increased demands and pressures brought about by COVID-19 (Brar & Singh, 2020).

Research has shown that within medical settings, including hospitals and outpatient offices, increasing cases, inadequate protective wear, demanding work hours, and inadequate therapies have contributed to the psychological burden of healthcare workers during the pandemic (Rose et al., 2021). Other major challenges have included limited in-person interaction, increased concerns for one's health, and shifting the nature of service delivery to telehealth (Albert et al., 2020; Goldman & Xyrichis, 2020; Peinado & Anderson, 2020). For many direct care workers, the pandemic has exacerbated the aspects of jobs that already required high personal, physical, and professional demands.

A recent meta-analysis investigating the psychological impact of COVID-19 on hospital and intensive care staff revealed that the high rate of anxiety, depression, stress, and insomnia reported among the staff surveyed could be explained by uncertainty around the future direction of the pandemic, increased workloads, impact on family units, and perceived lack of social support (Batra et al., 2020). Similarly, concerns about the virus have grown among direct care employees in nursing homes, assisted living facilities, and the homes of elderly patients and those with disabilities. Reported contributors to poor mental health among these long-term care

employees during the pandemic have included the toll of the virus on service recipients, staff members, and their families,difficulty balancing home and work, and stressful workplace conditions (Fisher et al., 2021). Because of the risk factors associated with COVID-19, direct service workers have been the most vulnerable to work-related burnout due to higher care demands and fewer available resources (Queen & Harding, 2020). This study has explored factors preventing or reducing the negative effects of work-related burnout among rehabilitation professionals during the pandemic.

Defining Burnout

Of all the factors with a negative impact on workers in healthcare and related occupations, workplace stressors have been explored most frequently in the literature. This study seeks to add to that literature with an examination of pandemic-related challenges among rehabilitation counselors and related staff and factors that have contributed to or reduced work-related burnout. The term "burnout" was coined by Freudenberger (1976), who began recognizing changes in moods, attitudes, and personalities among volunteers from various professional backgrounds who worked in a high-pressure, low results free clinic in the 1970s. Freudenberger (1976) defined burnout as "a state of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that has failed to produce the expected reward" (p.49). According to the World Health Organization (WHO, 2019), burnout is classified as an occupational phenomenon that involves chronic workplace stress that has not been managed adequately. Burnout is characterized by energy depletion or exhaustion, increased mental distance from one's job, and reduced professional efficacy (WHO, 2021). In other words, work-related burnout occurs when individuals cannot manage work-related sources of stress (Mousavi-Asl et al., 2021). The concept of burnout has been observed through studies in a variety of

settings, including medical care, education, behavioral health, and the financial sector (Maslach & Leiter, 2016).

Work-Related Burnout in Human Services

This study explored the influence of the COVID-19 pandemic on reports of work-related burnout among rehabilitation professionals in addition to preventative factors, such as collaboration, informed by recent research. Exploring the effects of the pandemic, Fish and Mittal (2021) found that widespread physical distancing fundamentally changed the ways mental health providers were accustomed to delivering services, forcing them to adapt to teletherapy. While this sudden shift served the needs of continued client contact, it limited the emotional and material resources of providers and reduced their ability to serve clients adequately. Numerous respondents reported dissatisfied feelings with work, questioned its meaning, and noted increased stress at work and in their personal lives.

Rehder et al. (2021) explored the influence of burnout on healthcare worker well-being using peer-reviewed research. Burnout was already a common risk for these workers but greatly increased due to the pandemic. It is therefore important to continue to evaluate additional interventions to improve healthcare worker well-being, such as by strengthening the ability of organizational culture to handle a crisis.

Mousavi-Asl et al. (2021) used the Maslach Burnout Inventory–Human Services Survey (MBI-HSS) to explore how work overload caused by COVID-19 increased burnout, finding that physicians showed higher levels of burnout than nurses. In another study, Alli et al. (2021) examined a cross-sectional study among nurses recruited from the Aga Khaan University Hospital, Nairobi. The study explored how limited resources and increasing workload within a fragile healthcare system exacerbated the mental strain on many workers taking care of COVID-

19 patients, especially nurses. The study concluded that nurses providing direct care on the frontline experienced moderate-to-severe symptoms of depression, distress, and burnout.

Similar to other human services professionals, rehabilitation counselors are vulnerable to burnout due to extensive client contact, caseload responsibilities, and client outcomes (Payne, 1989). Researchers have examined how rehabilitation counselors have reported burnout due to lacking the motivation to work, feeling physically and emotionally exhausted, or feeling frustrated by the stress related to work (Layne et al., 2004). Rigger (1985) was the first to provide a nationwide assessment of burnout and job satisfaction in rehabilitation by using the Maslach Burnout Inventory, Job Satisfaction Index, and demographic information. The study examined both rehabilitation administrators and direct service workers. Administrators reported higher levels of job satisfaction, while counselors with direct client contact reported a higher rate of burnout.

Blau et al. (2013) explored the correlations of burnout dimensions among psychiatric rehabilitation professionals. The study used an online survey containing demographic and work-related variables. Personal involvement was positively related to emotional exhaustion and depersonalization, and reducing personal involvement with clients appeared important to reducing burnout.

Maslach and Florian (1988) conducted an exploratory study about burnout, job setting, and self-evaluation among rehabilitation counselors, using the Maslach Burnout Inventory. Consistent with previous literature, they found that emotional exhaustion was linked to burnout due to work overload, perceived lack of control, and limited opportunities for growth within the profession.

Rehabilitation counseling is a client-centered profession that involves helping individuals to live more independently while suffering with physical, mental, developmental, or emotional disabilities and injuries; however, COVID-19 has presented new challenges and exacerbated existing struggles for people with disabilities (Bishop, 2021). Unlike medical staff or long-term care workers, rehabilitation counselors are typically community workers who have direct and frequent contact with the public in offices, homes, and workplaces. In addition, rehabilitation counselors must rely on interagency partnerships and interprofessional collaboration in order to more efficiently use limited resources in serving those with multiple service needs.

While there are many studies of work-related burnout across a variety of disciplines connecting the pandemic with work stress, a paucity of research has examined collaboration as a buffer against this stress. Furthermore, these three variables (work-related burnout, collaboration, and COVID-19) have yet to be studied together. Therefore, this study focused on work-related burnout among rehabilitation counselors who provided direct service care during the COVID-19 pandemic.

Such a study requires a reliable, valid instrument to assess work-related burnout in organizational settings. The MBI-HSS (Maslach & Jackson, 1981) is a scale used to measure three dimensions of work-related burnout (emotional exhaustion, depersonalization, and lack of personal accomplishment) in human services (see Appendix A). There are several other scales to measure work-related burnout, including the WRB Measure (Malakh-Pines et al., 1981), the Oldenburg WRB Inventory (Pines et al., 1981), the Copenhagen WRB Inventory (Kristensen et al., 2005), and the Shirom-Melamed WRB Measure (Shirom & Melamed, 2006). However, the MBI-HSS is the most widely used of these scales in human services and was thus used in the present study.

Work-Related Burnout and Professional Collaboration

Researchers have explored the challenges of establishing new methods of implementing a team-based approach by creating a more balanced job effort and reward system, increasing social support, and clarifying roles to reduce the effect of work-related burnout (Gandi et al., 2011). However, underlying risks from the pandemic among frontline workers include factors related to inadequate training, protocols, knowledge, and personal protection equipment as well as ineffective health systems, slow national responses, and poor leadership (Chen et al., 2020). Chen at al. (2020) explored how organizations were forced to establish and implement their own procedures with little experience or guidance. This led to challenges from chronic work-related stress, which led to burnout when not adequately managed. This in turn manifested as physical, cognitive, and emotional exhaustion; depersonalization; and reduced professional efficacy.

Prior to COVID-19, researchers had explored how collaboration among professionals was vital to ensure the best possible outcomes for clients (Ulrich, 2021). The WHO (2021) identified how partnerships are important for creating the foundation for organizational structures and relationships to further collaboration towards achieving healthy outcomes. Partnership is governed by clear visions and goals for health outcomes within the organization, which allows for professional dialogue for overall treatment (Payne, 1989). Collin et al. (2015) highlighted how organizations that place value on ongoing supervision, time management, accountability, collaboration, and clearly defined roles experience fewer problems with employee work-related burnout.

Donnelly et al. (2021) conducted a study on interprofessional primary care during the COVID-19 pandemic. It used an observational cross-sectional design that included social work professionals in Ontario, Canada. The results indicated that a focus on team support was vital

prior to and during the pandemic. Collaboration and communication within teams has been shown to be critical in supporting integration and coordinated care. The study concluded that almost half of the teams reported an increase in teamwork since COVID-19 and suggested use of teams showed positive health outcomes.

The present study hypothesized that rehabilitation counselors would report negative effects from the pandemic on their job performance, resulting in work-related burnout, as with other healthcare workers. The study also hypothesized, however, that the collaborative nature of rehabilitation counseling would buffer these professionals against work-related burnout (Oertle et al., 2013; Power & McKenna, 1994).

To measure this factor, the study used the Assessment of Interprofessional Team Collaboration Scale (AITCS). To support the hypothesis, it is important to expand on the definition of interprofessional collaboration, which is the direct interaction between at least two equal parties who voluntarily engage in shared decision-making and work together toward a common goal (Cook & Friend, 1991). It is also defined as a mutually beneficial well-defined relationship by two or more organizations to reach a goal (Mattessich et al., 2001). This type of collaboration reflects the integration of professionals from various backgrounds working together to deliver the highest quality of care (Goldman & Xyrichis, 2020).

In 2010, the WHO called interprofessional collaboration an essential component of health professions (Rodger et al., 2010). Hellman et al. (2016) surveyed 349 participants working in team-based pain rehabilitation with the Swedish version of the AITCS at baseline. Healthcare setting influenced the development of interprofessional collaboration, and the functioning of the team, in turn, influenced clinical practice. They found organizational support was important to facilitate interprofessional collaboration. Johnson and Mahan (2020) conducted a smaller study

on a multidisciplinary professional. The results were consistent with prior studies that highlighted how behavioral health providers valued collaboration with diverse professionals with the shared goal of supporting clients. They also indicated that collaboration was beneficial to professional development. While studies have identified many factors moderating the effect of a counselor's experiences, work-related burnout, particularly the need for additional collaboration among team members, was most frequently highlighted to improve service delivery (Herbert et al., 2020).

Significance and Purpose of the Study

There is a lack of research on rehabilitation counselors' experiences, professional collaboration, and work-related burnout during the COVID-19 pandemic. In one study, over 47% of professionals complained about their work being more challenging during this time (Brar & Singh, 2020), and counselors providing direct services have experienced higher levels of concern and anguish related to greater stress and mental fatigue (Salvador et al., 2021). The pandemic has demonstrated to organizations and personnel the importance of collaboration to increase knowledge and skills related to burnout (Jackson & Feit, 2011).

Prior research has established how work-related burnout can occur at the individual and organizational levels, and those who provide direct care have a greater risk of burnout (Salvador et al., 2021). A mediating factor of work-related burnout is interprofessional collaboration, which has been referred to as the foundation for creating positive patient outcomes (Collin et al., 2015). Therefore, it is important to explore the relationship between counselor experiences, interprofessional collaboration, and work-related burnout in relation to employee health, organizational health, and more positive results of inpatient care. In addition, high levels of work-related burnout and low levels of collaboration result in greater absenteeism, employee

turnover, and lack of trust (Koopman et al., 2002). Therefore, studying these phenomena could facilitate the well-being of the workforce and better service delivery. Understanding how these factors are connected could help counselors, employers, and educators establish methods to increase interprofessional collaboration under normal and difficult work conditions.

The researcher hypothesized that counselors would have experienced the same levels of emotional exhaustion and depersonalization noted by other direct care workers. Work-related burnout is not only a problem for individuals but also for teams and entire organizations (Gusy et al., 2021). The pandemic has highlighted the importance of collaboration among staff to expand knowledge and skills to meet work demands (Jackson & Feit, 2011) and to reduce employee work-related burnout (McCarthy, 2021).

This quantitative study explored the effects of professional collaboration and burnout on rehabilitation counselors who had provided direct care during the COVID-19 pandemic, were at least 21 years of age, were employed on a part-time or full-time basis, and had been working with people experiencing physical, mental, or substance abuse challenges. The study used the MBI-HSS and AITCS to explore how burnout could influence professional collaboration in the target population.

Previous research has explored the impact of individual well-being, high turnover, and positive client outcomes. This study expanded on that work to inform educators, students, and professionals about the importance of professional collaboration and methods that develop collaborative skills. To this end, the study explored the potential relationships between work-related burnout and the limitations imposed by the pandemic on collaboration. Understanding these relationships should help stakeholders establish new methods to increase interprofessional collaboration under normal and crisis conditions.

Definition of Terms

Cooperation: Orchard et al. (2012) defined cooperation as acknowledging and respecting others opinions and viewpoints while maintaining the willingness to examine and change personal beliefs and perspectives. A key cooperative attribute is clearly defining goals, priorities, roles, and responsibilities (Sampson & Marthas, 1977).

Collaboration: Collaboration is a means for individuals to join together to promote skills, creativity, and productivity to achieve a desired goal (Morel, 2014).

COVID-19 pandemic: On March 11, 2020, the WHO declared COVID-19, the disease caused by the SARS-CoV-2, a pandemic (WHO, 2021). The symptoms of COVID-19 affect people differently; especially as it relates to work-related burnout. Deaths and illnesses peaked in April 2020 and began flattening in the following months. The virus has the ability to spread from an infected person's mouth or nose by small liquid particles when an individual coughs, sneezes, speaks, sings, or breathes, and there have been approximately 640,395,651 confirmed cases and 6,618,579 deaths since November 30, 2022.

Direct care worker: Direct care workers are employed to provide personal care or daily living activities to clients, patients, or residents regardless of setting (Dailey et al., 2014).

Organizational climate: The climate of an organization is based on shared history, expectations of job duties, ethical obligations, values that affect the behavior of everyone in the organization, and the underlying beliefs that shape the actions of staff (Kurtz, 2008).

Interprofessional collaboration: At its core, collaboration occurs when two or more entities work together to produce a mutually desired outcome (Green & Johnson, 2015). In rehabilitation counseling, it is a method of providing holistic care that maximizes team members'

specialized training, skills, experience, and knowledge to enable optimal health outcomes (Albert et al., 2020).

Partnership: Partnerships involve being respectful to all team members by sharing work equitably (Morley & Cashell, 2017).

Shared decision-making: Shared decision-making in this context involves communication to achieve healthy client outcomes (de las Cuevas et al., 2020). It relies on openness, trust, communication, and respect within an organization (Morley & Cashell, 2017).

Work-related burnout: Work-related burnout is a psychological syndrome emerging as a prolonged response to chronic interpersonal stressors on the job. Work-related burnout has also been referred to as work-related stress. Associated behaviors include overwhelming exhaustion, feelings of cynicism, detachment from the job, a sense of ineffectiveness, and lack of accomplishment (Maslach & Letier, 2016).

CHAPTER 2

LITERATURE REVIEW

This chapter reviews the relevant literature, examining three variables of interest: counselors' experiences, work-related burnout, and interprofessional assessment of team collaboration. Related factors described include work-related components that impact burnout, demographic factors, and other risk factors. The chapter also explores research identifying key concepts related to interprofessional collaboration and research drawing a relationship between counselors' experiences, work-related burnout, and interprofessional collaboration. Given the limited data on this relationship, especially during the height of the pandemic, this review includes research about similar professions as well.

Work-Related Burnout

The concept of work-related burnout emerged in social psychology, focusing on lawyers serving vulnerable populations, addiction volunteers, probation officers, and similarly stressful professions providing direct services (Neal & Lyons, 2020). Layne et al. (2004) studied the relationship of work-related burnout and turnover of full-time rehabilitation counselors from the American Rehabilitation Counseling Association. On average, respondents were 44 years old, and 63% were women. A total of 657 of the 982 members responded. The study used the OSI-R to measure occupational stress, strain, and coping; a turnover scale; and an individual data form. As their stress increased, counselors were more likely to seek a different position within or outside the field. The study provided suggestions for effective coping strategies for dealing with stress in the workplace and emphasized the importance of identifying factors associated with job satisfaction and performance as well as using balance and collaboration to reduce work-related stress, burnout, and turnover. The study concluded that although coping resources and strain

were useful in exploring how people dealt with stress, it was the occupational stress itself that affected the turnover intentions of rehabilitation counselors. Similar to other studies, the results found that counselors' occupational roles and responsibilities in their organization could increase stress. Mullen et al. (2017) examined the prevalence of perceived stress, burnout, and job satisfaction among school counselors. The results indicated that counselors' perceived stress and burnout was related to their age and experience; however, burnout was associated with their job satisfaction and ability to perform their duties. In an earlier study, Layne et al. (2004) found that stress was the primary factor in turnover among rehabilitation counselors; as a counselor's stress level increased, they were more likely to leave the position.

COVID-19 and Work-Related Burnout

COVID-19 is an infectious disease caused by SARS-CoV-2 with symptoms of a mild-to-moderate respiratory illness that vary from person to person, especially those considered more at risk (WHO, 2021). The most common symptoms include fever, cough, tiredness, and loss of taste or smell, while less common symptoms include sore throat, headache, aches and pains, diarrhea, rash, and red eyes. Symptoms may become serious, requiring additional medical attention. COVID-19 is highly infectious, causing those more at risk to present with symptoms that include difficulty breathing, shortness of breath, loss of speech, mobility problems, confusion, and chest pain. According to WHO (2021), symptoms tend to be worse for older patients and those with underlying medical conditions, such as cardiovascular disease, diabetes, chronic respiratory disease, or cancer.

Due to the severity of the virus, studies have highlighted its effects on direct service workers. Omar et al. (2021), for instance, studied the prevalence of burnout among physicians in Egypt during the pandemic by identifying predictors of burnout. The study used a cross-sectional

descriptive design, occupational and health-related variables, the Psychosomatic Disorder Symptom Scale, and the Maslach Burnout Inventory. Physicians were asked to participate in the study online. Out of 503 participants, 52.7% were women and 67.8% were married. The study found 72.8% had a high burnout level, 26% had average burnout, and only 1.6% had low burnout. Burnout was significantly higher among physicians with a diploma or master's degree in education dealing with frequent critical, suspected, and confirmed COVID-19 patients.

Since WHO (2021) declared COVID-19 a global pandemic, a growing number of studies have examined its psychological impact on professionals providing direct care and collaboration. Afulani et al. (2021) conducted a cross-sectional study among healthcare workers in Ghana, with stress and burnout as the dependent variables, using the Chen Perceived Stress Scale and Shirom-Melamed Burnout Measure. Out of the sample, 20% were doctors, 62% were nurses, and 18% came from other professionals. The study found evidence of high stress and burnout and low perceived preparedness to respond to the pandemic due to fear of infection.

To reduce the spread of COVID-19, WHO (2021) released preventative measures and indicated that the best way to avoid transmission was to be educated about the virus and how it spreads, staying at least one meter apart, wearing a properly fitted mask, washing hands or using an alcohol-based solution frequently, and getting vaccinated. According to the WHO, the virus can spread from an infected person's mouth or nose by small liquid particles when the person coughs, sneezes, speaks, sings, or breathes. There have been approximately 640,395,651 confirmed cases and 6,618,579 deaths as of November 30, 2022.

Researchers have highlighted how concerns about infection have created challenges and contributed to work-related burnout in direct service care. Alli et al. (2021) conducted a cross-sectional study of nurses recruited from the Aga Khaan University Hospital in Nairobi, exploring

how nurses were critical to the workforce in Kenya. There were approximately 51,649 nurses below the age of 60, with the majority of participants being women between the ages of 21 and 30. The study explored how limited resources and increased workloads within a fragile healthcare system exacerbated the mental strain faced by many workers, especially nurses, taking care of COVID-19 patients. To identify factors associated with mental health disorders, the study used multivariate regression analysis on questionnaire data targeting demographics, work title characteristics, information about caring for COVID-19 patients, and symptoms of depression, anxiety, insomnia, distress, and burnout. The validated questionnaires included the PHQ-9, GAD, Insomnia Severity Index, Impact of Event Scale Revised, and Sandford Professional Fulfillment Index. A total of 111 nurses (64%) were frontline workers directly engaged in COVID-19 care. The majority (64%) assisted approximately 5–20 patients and 66.7% had lost a patient to COVID-19, whereas 71.2% reported to have been trained to care for COVID-19 patients. Only 1.8% reported a prior diagnosis of any mental health disorder. Frontline nurses reported experiencing more moderate-to-severe symptoms of depression, distress, and burnout, with work-related burnout contributing to higher rates of these symptoms.

Kannampalil et al. (2020) likewise examined the physical and emotional strain of frontline workers. They investigated the effects of trainees' exposure to patients being tested for COVID-19 by evaluating their level of depression, anxiety, stress, burnout, and professional fulfillment. The researchers evaluated perceived life stressors, such as childcare, home schooling, personal finances, and work-family balance, through a web-based survey of all physician trainees in the Washington University School of Medicine, Barnes Jewish Hospital, and St. Louis Children's Hospital. A total of 393 trainees completed the survey, a 29% response rate. Participants were primarily residents, 66% were women, and 63% were Caucasian. Trainees

exposed to COVID-19 patients experienced moderate to extremely high perceived stress regarding childcare, a lower work-family balance, and significantly higher perceived life stressors. Frontline workers experienced negative psychological symptoms due to a continuously changing clinical environment.

Highly complex work can lead to a sense of hopelessness related to high standards, disillusionment, and work-related burnout among professionals with less experience, and direct service workers often have high levels of work-related burnout (Salvador et al., 2021). Salvador et al. (2021) investigated the impact of COVID-19 on 634 Brazilian healthcare staff working directly with patients diagnosed with COVID-19. The sample was 85.5% female with a mean age of 37. The measures used were the Post-Traumatic Stress Disorder Checklist–Civilian Version, Generalized Anxiety Disorder Scale, and Maslow Burnout Inventory. Frontline workers showed higher anxiety and psychological distress that involved work-related burnout. However, the overall differences in burnout and post-traumatic stress were not statistically significant. Nevertheless, these professionals tended to have higher levels of concern about the future, stress, mental tiredness, irritation, and fatigue.

Stressors associated with the pandemic can impede coping and other measures used by counselors to provide quality services (Bishop, 2021). Omar et al.'s (2021) study, as mentioned previously, examined how pandemic-related factors were associated with physical and emotional stressors. In the sample, 72.8% identified having work-related burnout due to added pressures. Burnout was high and associated with organizational stressors. The study emphasized the need for further preventive interventions and early detection of work-related burnout in healthcare.

Prior to the COVID-19 pandemic, numerous researchers explored how direct service workers were overworked and overextended, with growing stress associated with societal

problems. The pandemic required these workers to acquire additional skills and adapt to rapidly changing work conditions (Barsky, 2020). Because of the risks associated with COVID-19, direct service workers continued to be more vulnerable to work-related burnout due to higher demands and fewer resources (Queen & Harding, 2020).

Similar to other human services professionals, rehabilitation counselors are vulnerable to burnout due to extensive client contact, caseload responsibilities, and negative client outcomes (Payne, 1989). Rehabilitation counselors have reported burnout due to lacking the motivation to work, feeling physically and emotionally exhausted, or feeling frustrated due to stress from work (Layne et al., 2004). Rehabilitation counseling provides direct care to individuals with mental and physical disabilities (Payne, 1989). Counselors explore clients' strengths and limitations, and typical duties include training, job placement, evaluating medical reports, and exploring job skills (Layne et al., 2004). Prior to the pandemic, studies explored how rehabilitation counselors were faced with increasing client caseloads, complex problems, and fewer resources (Payne, 1989). Previous studies have explored the effects of COVID-19 and burnout in various professions, but there continues to be a gap regarding rehabilitation counselors.

Jalili et al. (2021) examined work-related burnout among 615 healthcare professionals providing direct services during the pandemic. The study employed a cross-sectional survey of healthcare workers at six university-affiliated hospitals who had been taking care of COVID-19 patients. Using the Maslach Burnout Inventory, the study explored factors of work-related burnout associated with age, gender, marital status, children, job, experience, and workload. The results indicated high levels of work-related burnout associated with younger age and women.

Mousavi-Asl et al. (2021) examined burnout among 87 nurses and physicians in a hospital using the Maslach Burnout Inventory. The age of participants varied from 24 to 54, and

74.7% were female. The study assessed the correlation between hours working in COVID-19 wards and scores in the three dimensions of the inventory using Spearman's correlation. Physicians showed higher levels of burnout than nurses.

Manzano and Ayala (2021) explored the psychological impact on nurses from COVID-19. The cross-sectional study comprised 771 nurses working in the emergency room, intensive care, and pneumology units in a hospital in northern Spain. Demographic factors consisted of gender, age, marital status, type of contract, and years of experience, and the study used the Spanish Burnout Inventory and the Scale of Perceived Threat of COVID-19. Participants were 42 years old on average and mostly women. A total of 610 lived with a partner and 161 lived alone. The average number of years worked was 17. The results confirmed that burnout among nurses was due to the perceived threat of COVID-19.

Vitale and Casolaro (2021) examined frontline Italian workers who were considered to have a high risk of infection due to long stressful shifts treating COVID-19 patients. The study investigated levels of burnout, anxiety, and depression using the Maslach Burnout Inventory and the Hospital Anxiety and Depression Scale. Of the 400 participants, 296 (74%) were female, 104 (26%) were male, 263 (65.75%) had work experience not exceeding 10 years, 71 (17.75%) had worked from 11 to 25 years, and 66 (16.5%) had experience of over 25 years. Nurses presented more normal anxiety and depression levels compared to other studies, but there was still an increase in burnout and emotional exhaustion.

Similar to healthcare, rehabilitation counselors have likewise been confronted with challenges providing direct services to vulnerable clients during the pandemic. Prior to COVID-19, individuals with disabilities were considered to be the largest marginalized group in the United States due to the challenges they faced in their communities (Lund et al., 2020). As a

consequence, these individuals were the highest risk group during the pandemic, resulting in poor health outcomes (Bishop, 2021). According to the CDC (2021), individuals with disabilities have an increased risk of becoming infected due to limited mobility, difficulty comprehending preventative measures, and difficulty effectively communicating symptoms, leading to additional needs and challenges for clients and counselors. It is thus critical to explore the experiences of burnout among rehabilitation counselors servicing vulnerable clients during the pandemic.

Operationalizing Work-Related Burnout

For the purposes of this study, workplace stress occurs when there is a loss, or threat of loss, of an individual's valued resources (Hobfoll, 1989). Work-related burnout occurs as a consequence of "prolonged response to chronic emotional and interpersonal stressors on the job" (Maslach et al., 2001, p. 397) and is defined as "a state of physical, emotional and mental exhaustion caused by long-term involvement in situations that are emotionally demanding" (Malakh-Pines et al., 1981, p. 9).

Work-related burnout has all the features of a psychological syndrome but is not included in the fifth edition of the *Diagnostic and Statistical Manual* (*DSM-5*, American Psychiatric Association, 2013). Instead, the *DSM-5* codes work-related burnout as a diagnostic feature of adjustment disorder, undefined trauma, and stress-related disorders. In 2022, the WHO included work-related burnout as a mental health concern but not a medical condition (Toktamiş & Kküçük, 2021). It is considered an occupational phenomenon in the WHO International Classification of Diseases (ICD-11), a diagnostic tool for medical providers, and the WHO (2019) website describes it as "Factors influencing health status or contact with health services – which includes reasons for which people contact health services but that are not classed as illnesses or health conditions." Currently, the ICD-11 codes work-related burnout as one of the

factors that affect health status and access to health services under Z73.0: non-medical life management difficulties (Toktamiş & Kküçük, 2021).

A reliable, valid instrument is necessary to assess this psychological syndrome in organizational settings. For the purposes of this study, the MBI-HSS (Maslach & Jackson, 1981) was used to measure three dimensions of work-related burnout (emotional exhaustion, depersonalization, and lack of personal accomplishment) in human services (see Appendix A).

Emotional Exhaustion

Emotional exhaustion is one of the primary indicators of work-related burnout (Leiter & Maslach, 1988). It refers to a state of fatigue after sustained depletion of emotional resources (Maslach & Jackson, 1981) and being overwhelmed and emotionally drained (Leiter & Maslach, 1988; Maslach et al., 2001). One of the primary causes is employees' sense that they have insufficient emotional resources to deal with demands and stressors within their organization (Maslach et al., 2001). A closely related sign of work-related burnout is emotional exhaustion (Maslach & Jackson, 1981).

Studies have explored how this type of exhaustion can affect the organization. For instance, Wang et al. (2018) examined how gender and trust in colleagues correlated with emotional labor and emotional exhaustion. They measured the emotional labor strategies of 679 Chinese service employees, of which 425 (62.8%) were men, 246 were women (37.2%), and eight did not identify a gender, while 318 (46.8%) were in their 20s, 259 (38.1%) were in their 30s, 78 (11.5%) were in their 40s, and 19 (2.8%) were in their 50s. The findings indicated that trust strengthened relationships between emotionally exhausted employees. There have been conflicting results when examining the role of the workplace and the relationship between emotional labor and emotional exhaustion in burnout; however, women were generally found to

be of higher risk for emotional exhaustion than men, more sensitive to exploitative behavior, and tended to be cooperative only in trusting relationships. Men, in contrast, showed higher risk-taking preferences and decided whether to cooperate based on their interests.

Engelbrecht and Wilke (2021) examined factors associated with emotional exhaustion in nursing students. Nursing students face dual sources of stress from academic and clinical demands that may harm their emotional well-being and prevent them from acquiring adequate knowledge and skills to care for patients. A cross-sectional descriptive survey was completed by 444 registered undergraduate and postgraduate nursing students. The measures consisted of the Maslach Burnout Inventory, professional quality of life, Perceived Stress Scale, and Coping Strategies Inventory Short Form. Overall, students were at a moderate risk of emotional exhaustion and compassion fatigue. Significant predictors of emotional exhaustion among undergraduates were increased due to levels of compassion fatigue and stress associated with assigned tasks and workloads.

Depersonalization

Direct service professionals are required to provide care to individuals and refrain from displaying negative emotions; however, stressors can cause professionals to depersonalize to reduce emotional exhaustion, regain emotional resources, and increase energy (Leiter & Maslach, 1988). Depersonalization is a broad construct that includes negative attitudes about job duties, coworkers, and organizations (Leiter & Maslach, 1988). It is a type of cynicism that defines how people act and perceive others within the organization, which can lead to emotional detachment (Maslach et al., 2001).

This level of work-related burnout consists of an individual presenting a lack of energy that leads to a maladaptive method of coping (Maslach et al., 2001). Depersonalization or

derealization is one's negative, pessimistic attitudes toward others (Bridgeman et al., 2018). It is defined by individuals losing a sense of their identity (Leiter & Maslach, 1988). Maslach et al. (2001) found that depersonalization could lead to maladaptive coping, such as using recreational drugs, difficulties adapting to difficult situations, and severe stressors related to interpersonal life events. These coping skills may cause professionals to distance themselves from job duties (Maslach et al., 2001).

Hunter et al. (2004) discussed how this dimension defines an experience in which individuals feel a sense of false reality and detachment from themselves. According to the *DSM-5*, the first diagnostic category of depersonalization was developed in 1968 and continued until it was recently updated in the *DSM-5* (American Psychiatric Association, 2013). The diagnosis of depersonalization has shifted over time, but the *DSM-5* provides substantive criteria by defining it as the feeling of a false reality known as depersonalization disorder, recently renamed depersonalization-derealization disorder because individuals can present symptoms of depersonalization, derealization, or both.

Michal et al. (2016) examined a case series of 223 patients with depersonalization-derealization syndrome from the Department of Psychometric Medicine and Psychotherapy at the University Medical Center Mainz in Germany. The study assessed measures by using the CDS-2, a version of the Cambridge Depersonalization Scale, and the PQ-9. An analysis of 223 patients identified depersonalization in a clinical department and 1,129 patients with depressive disorder but without a comorbid diagnosis of depersonalization-derealization. Despite the high comorbidity of depersonalization-derealization syndrome, depressive disorders are similar to the symptoms of depression and anxiety. According to Michal et al.(2016), depersonalization has long been considered a hard-wired response to severe stress but has a relatively small empirical

basis. Michal et al. (2016), examined this syndrome in a mental health center to reveal a specialized form of it in a group of younger patients with depressive disorder. The study highlighted how this syndrome can be long lasting and cause severe impairments in psychological, social, and occupational functioning, disrupting the individual's work and social life.

Miguel-Puga et al. (2021) examined frontline workers providing care during the pandemic to assess the influence of anxiety and depression. Dissociative symptoms may contribute to the development of PTSD and additional symptoms that may result in depersonalization symptoms and acute stressors. The study surveyed 204 participants who were 19–58 years old, divided into 92 men and 112 women. It used the Pittsburgh Sleep Quality Index, Stanford Acute Stress Questionnaire, State-Trait Anxiety Inventory, and the short version of the Burnout Measure, and the Posttraumatic Stress Disorder Symptom Severity Scale. Overall, the results of this study indicated that women reported pre-existing anxiety and were more prone to acute stress. In conclusion, pre-existent anxiety, depression, dissociative symptoms, and coexisting acute anxiety contribute to psychological stressors.

Personal Accomplishment

The last dimension of the MBI-HSS is lack of personal accomplishment, where the perception of one's lack of effectiveness and competence builds feelings of low self-esteem and contributes to work-related burnout (Hartney, 2008, p. 12). Personal accomplishment is a sense of satisfaction from meeting personal goals (Maslach et al., 2001), which can reduce negative feelings related to one's job performance (Tepayakyl & Rinthaisong, 2018). In contrast, reduced personal accomplishment is a decrease in one's perceived professional performance and can lead to higher turnover (Maslach et al., 2001). This sense of accomplishment is affected by personal

life achievements, and the lack of goals in one's personal and professional life can lead to stress and work-related burnout. This dimension is thus related to job satisfaction. Although there is no universal definition, job satisfaction is generally the set of positive feelings people have toward their employment or the degree to which they enjoy their job (Tepayakyl & Rinthaisong, 2018). Job satisfaction represents work satisfaction, enthusiasm, and positive desires and feelings have been considered one of the most significant factors determining workplace outcomes (Lee, 2017).

Kiselevea (2018) investigated how bank employees providing direct services to clients were the most vulnerable to emotional work-related burnout. Participants had a range of 117 specialties and consisted of 90 women and 27 men working directly with clients in a bank. They were 21–54 years old and had been working for six months to 15 years. This study used the EBI to detect emotional disturbances and their dysfunctional consequences related to professional activity and coworker interaction. Major factors connected to burnout included the inability to adapt to a changing workplace, constant psycho-emotional overload related to interaction with people, high responsibility, psychologically difficult interaction with clients burdened with negative emotions, and the negative impact of conflicts with other staff members. Age and work experience were important, but the study found no association between them and burnout. Women were more prone to burnout than men.

Kirk-Brown and Wallace (2004) investigated the predictors of work-related burnout and job satisfaction among direct service counselors in mental health, who were assessed through the Employee Assistance Association. Each of the 82 participants (56 women, 26 men) completed five scales measuring work-related burnout. Their ages ranged from 23 to 72, and the length of time employed ranged from six months to 25 years. The study used emotional exhaustion,

intrinsic job satisfaction, role conflict/role ambiguity, and organizational knowledge as variables. Additional personal and professional information included gender, age, type of counselor training, social work, psychology, and length of employment. The study reported limited results for satisfaction, which indicated work-related burnout was not an outcome of job-related tasks. Role conflict, however, was a significant predictor of burnout, and intrinsic job satisfaction was significantly predicted by the counselors' perceptions of job challenges and level of organizational knowledge.

Al-Qahtani and Alhazzani (2021) examined the prevalence of burnout among neurologists in Saudi Arabia using the MBI-HSS. The study described work-related burnout as a psychological syndrome defined by emotional exhaustion, depersonalization, and reduced accomplishment. The study included 62 consultants and 34 residents, of which 41 (62%) were men, and the majority were 35–44 years old. Participants who reported long working hours were subject to higher levels of stress. There were high rates of burnout in all three domains, but depersonalization showed the highest (41.2%). Overall, the study indicated that Saudi neurologists suffered from high levels of burnout.

Demographic Factors Associated with Work-Related Burnout

Work-related burnout can cause physical as well as mental problems. According to Szigethy (2014), work-related burnout develops in three stages. The first consists of milder, episodic symptoms that include mental fatigue, frustration, and aches and pains. The second consists of longer-lasting symptoms that are more challenging to reverse, such as boredom, apathy, anxiety, and depression. The third is severe work-related burnout, which includes symptoms of more chronic psychiatric and physical health disorders, such as depression, heart attacks, and peptic ulcers. Work-related burnout can be related to the limitations imposed on the

daily lives of Americans due to COVID-19. Work-related burnout can occur at the individual and organizational levels, and those who provide direct care have a greater risk (Salvador et al., 2021). Freudenberger (1976) recommended focusing on the individual experience of work-related burnout while others have considered the importance of demographic factors.

Yektatalab et al. (2019) studied the relationship between work-related burnout and demographic variables among nurses providing direct care at Mothari Hospital and Peymanieh Hospital in Iran. This descriptive study employed the Maslach Burnout Inventory with 223 (89.2%) nurses suffering from moderate-to-high burnout. The inclusion criteria were a minimum of two years of work experience, willingness to participate, and higher education. There was a significant correlation between emotional exhaustion and personal accomplishment. However, there was no significant relationship between burnout subscales related to number of children, type of hospital ward, type of employment, or marital status. There was also a significant positive correlation between the subscales of burnout and younger age, lower income, higher education, and male gender.

Age

Younger age is the most frequently identified risk factor related to high stress and work-related burnout (Simionato & Simpson, 2018). According to Payne (1989), work-related burnout is reportedly higher among younger employees than those over 30–40 and decreases with age. This trend could be due to stressors related to work demands (Miranda Alvares et al., 2020). Peterson (2004) measured leadership in organizational development in a sample of 235, (100 female, 132 male, and 3 did not provide a response to the item) alumni from a Midwestern university in the U.S., with an average age of 35. The study used the Perceived Leader Integrity Scale, Belief in universal moral rules, and Social desirability response bias. A Likert scale was

used for responses, and higher values represented higher perceived leader integrity. All respondents provided socially acceptable responses for unethical behavior, and the study established a relationship between leader integrity and employee intentions. The results indicated an interaction between perceived leader integrity and belief of universal moral rules. Individuals who held a strong belief in universal moral rules exhibited lower intentions of committing unethical acts regardless of the perceived integrity of their leaders. For individuals not adhering to such a belief, intention to commit unethical acts decreased as the perceived integrity of their leaders increased.

Similarly, Lanham et al. (2012) examined how gratitude related to burnout and job satisfaction among mental health professionals employed at community mental health agencies and a university counseling center in the Midwestern United States. Ages ranged from 23 to 62, and the measures consisted of the Maslach Burnout Inventory, job satisfaction, gratitude, and hope. Lanham et al.(2012) found from 65 respondents that age was one of the most important predictors of work-related burnout, as younger workers were significantly more likely to experience it; other predictors were ineffective supervision and level of gratitude.

Marchand et al. (2018) evaluated the relationship between gender and work-related burnout in 63 workplaces in Quebec. The burnout rate reduced with increasing age in men and women between the ages of 20 and 35; over 55 showed the highest levels of burnout. Various studies have considered age a factor in work-related burnout, but results have been inconclusive (Brewer & Shapard, 2004). Some have found no correlation between age and burnout while others have. Differences in findings might be related to other factors, such as different professions and circumstances.

Ahola et al. (2008) explored burnout and medically certified sick leave in a population-based study of Finnish employees. While burnout is a common problem, its association with sick leave is poorly understood. Participants consisted of 3,151 employees aged 30–60, who participated in a comprehensive health study that included the assessment of physician-diagnosed physical illnesses, the *Diagnostic and Statistical Manual of Mental Disorders (DSM IV) and Burnout*, and the Maslach Burnout Inventory–General Survey. Medically certified sick leave was more prevalent among employees with burnout, and age was negatively related to burnout among young women but positively related to older women and middle-aged men. Work-related burnout for women appeared more in the early work years, less in later work years, and was virtually nonexistent in-between. In contrast, burnout among men was more common in middle age and mostly nonexistent otherwise. Similar to other professions, age may be a factor among rehabilitation counselors, but there is a lack of research on this population.

Level of Experience

A lack of experience has been connected to higher stress among young professionals at the forefront of service delivery during the pandemic (Ivanović et al., 2020; Kannampallil et al., 2020). Salvador et al. (2021) investigated 634 Brazilian healthcare staff working directly with patients diagnosed with COVID-19. Participants showed higher anxiety and psychological distress involving work-related burnout, but this difference was not statistically significant. Nevertheless, they tended to have higher levels of concern about the future, stress, mental tiredness, irritation, and fatigue. Similarly, Ivanović et al. (2020) found that 36.7% of new trainees suffered from work-related burnout and showed how the stressors of being a healthcare provider in training increases the ongoing demands of establishing a therapeutic relationship with patients.

A contributor to this trend could be the unrealistically high expectations younger workers often have for their clinical efficacy, making it harder to adjust to the demands of their organization (Simionato & Simpson, 2018). In another study, Brewer and Shapard (2004) explored how new professionals from various positions were more likely to experience work-related burnout than more experienced employees. The study found a negative correlation between burnout and higher experience.

Mousavi-Asl et al. (2021) examined the frequency of work-related burnout among physicians and nurses at the Amir A'alam Hospital in Iran. The study included 87 healthcare staff in direct contact with COVID-19 patients. Participants were 24 to 54 (M = 31) and took the MBI-HSS, which showed no correlation between work hours and burnout and no significant difference between men and women or between single and married staff. Overall, higher levels of work-related burnout were found among nurses and staff with more experience adjusting to crises, in contrast to the studies cited above. Findings showing years of experience as a predictor of burnout have thus been contradictory (cf. Brewer & Shapard, 2004). In addition, there continues to be a lack of research on the relationship between rehabilitation counselors' level of experience and burnout during the COVID-19 pandemic.

Gender

An individual's gender has been associated with work-related burnout in rehabilitation counseling (Young, 2015). Women have long struggled for equal rights, access to education and jobs, reproductive rights, and fair treatment (Bernard & Goodyear, 2004). Even before the pandemic, women typically report higher stress levels than men (Kannampallil et al., 2020). According to Young (2015), women tend to score higher on exhaustion but this could be related to gender roles. In addition, women are more prone to work-life conflict when managing

conflicting responsibilities which contributes to higher stress (Bernard & Goodyear, 2004; Simionato & Simpson, 2018).

As described above, Marchand et al. (2018) found that burnout reduced with increasing age in men while women between 20 and 35 and over 55 showed the highest levels of burnout. Ahola et al. (2008) also found combined demands at home and work increased stress among women. Only one study identified men as having a higher risk for work-related burnout than women during the pandemic (i.e., Farsi et al., 2021).

How employees collaborate can also influence work-related burnout and turnover. Cross et al. (2018) found that as in-demand collaborators, men were 36% more likely to share knowledge and expertise, an informational resource, while women as collaborators were 66% more likely to assist others in need using their personal and emotional resources. The latter behavior typically costs the individual more energy and over time can contribute to disengagement from the workplace and eventually turnover.

Race

Race-related factors have also been related to job performance and work-related burnout. These stressors have contributed to higher psychological strain and lower satisfaction (Young, 2015). However, non-White individuals providing direct service care have been less likely to disclose symptoms of work-related burnout than their White counterparts (Simionato & Simpson, 2018). Thus, there has been little research showing the impact of race on people providing direct care during the pandemic.

Shell et al. (2021) investigated race-related stress, work-related burnout, and secondary traumatic stress among 120 Black mental health therapists using three subscales (individual racism, cultural racism, and institutional racism) from the Index of Race-Related Stress Brief

Version. Stress harmed the mental and emotional health of Black people and increased the risk of burnout when they were exposed to clients' and their own race-based traumatic stress. Cultural, individual, and institutional racism were all positively associated with work-related burnout. Race-related stressors were shown to function as a workplace and societal source of stress that could overwhelm Black professionals' ability to cope.

Lawrence et al. (2021) examined ethnic differences related to burnout in order to raise awareness within the medical field about the needs of underrepresented groups. The study compared levels of work-related burnout among physicians, residents, and students who identified as belonging to racial/ethnic minority groups. The findings came from 16 peer-reviewed studies assessing racial/ethnic differences in burnout using the Maslach Burnout Inventory published in English on PubMed, PsycINFO, Countway Discovery Medicine, and Web of Science. While the findings showed little-to-no difference between those who identified as minorities and those who did not, the findings could have been influenced by social bias. The study did find that underrepresented medical professionals were more likely to leave their position or reduce work hours to part-time due to work-related stress and burnout, and there was a significant correlation between this scenario and their sense of personal accomplishment.

Influence of Interprofessional Collaboration

Previous studies have highlighted how interprofessional collaboration can improve the work environment, ensure more positive client outcomes, and possibly reduce burnout. Therefore, there is a need to explore its influence among rehabilitation counselors. Prior to the COVID-19 pandemic, researchers examined the benefits of interprofessional collaboration across geographic and political boundaries. While much the published work examined interprofessional collaboration in Canada, the United Kingdom, the U.S., and Australia, it has gained more

attention around the world since the WHO declared it an essential component for health professionals (Rodger et al., 2010). Several scholars have agreed that positive workplace relationships are necessary for interprofessional collaboration and avoiding work-related burnout (Kahn, 1999; Young, 2015). This suggests the presence (or absence) of positive relationships can shape the effects of workplace stress and burnout, but these relationships have not been studied. Organizational environment has been linked to burnout due to lack of support, and research has shown how teamwork can improve overall well-being (Rehder et al., 2021).

Interprofessional collaboration is the foundation of strong service delivery, and by creating interprofessional partnerships, organizations can achieve more positive patient outcomes (Collin et al., 2015). Better teamwork can improve interactions with colleagues and the overall environment by mitigating burnout (Rehder et al., 2021) and building ethical communication, trust, and respect (Campoe, 2020). Managing a healthcare organization effectively requires collaborative measures to provide a framework for successful caseload management and work-related burnout prevention (Payne, 1989). Furthermore, collaboration promotes supportive management, awareness of services, negotiation, and appreciation of differences (Savolainen et al., 2020).

Leadership plays a vital role in interprofessional collaboration. Hellman et al. (2016) surveyed individuals working in team-based pain rehabilitation with the Swedish version of the AITCS at baseline. Content and face validity yielded positive results, internal consistency varied from 0.79 to 0.96, and test-retest reliability showed excellent stability with intraclass correlation values above 0.75 for all subscales. For this larger study, 558 individuals were identified by administrative staff in three county councils, 533 of which met the inclusion criteria, and 373 filled out the survey. They represented various professions, 80% were women, and 48% were 51

or older. For the none responders , regarding sex for 95% among these were 31% were men and 64% were women. The sample contained 349 individuals who responded to 70% of the items in each subscale, and the vast majority were women working in the public sector. Healthcare setting influenced the development of interprofessional collaboration; how well the team functioned influenced the quality of clinical practice. Organizational support was found to facilitate interprofessional collaboration.

Employees who collaboratively engage with one another may be more resilient to factors that undermine workplace mental health (Kahn, 1999). Empirical studies in healthcare have revealed positive correlations between interprofessional collaboration and better outcomes, such as patient safety and quality of care (Laschinger & Finegan, 2005; Small & Small, 2011; Squazzo, 2011; Wagner & Harter, 2006), as well as lower turnover intention (Shuck et al., 2014).

Despite these benefits, Cross et al. (2018) found that 20–35% of value-added interprofessional collaboration came from only 3–5% of employees. These employees' desires to help others quickly enhance their performance and reputation within their organization, but it also fueled the demands on these few individuals, making burnout more likely. In other words, if leadership allows too few to bear the burden of collaboration, it hinders the performance of the individual and the group and becomes a strong predictor of disengagement.

Johnson and Mahan (2020) conducted a small multidisciplinary study that included 32 of 42 participants (i.e., 76% of participants responded), who consisted of 21 women, 16 White Americans, 14 Black Americans, and two who reported as "mixed race." The age groups were 21–31 (N = 14), 32–42 (N = 15), and 43–60 (N = 3). All participants held a master's or higher degree and had practiced for at least three years in social work or medical social work (N = 12); professional counseling (N = 9); psychology, clinical psychology, and school (N = 5); behavioral

health (N = 2); or child and youth interventions (N = 2). The results were consistent with prior studies that highlighted how behavioral health providers value collaboration and working with diverse professionals with the shared goal of supporting clients. The study also indicated collaboration was beneficial to professional development.

In contrast, commonalities across studies suggest that the components of interprofessional collaboration (cooperation, coordination, partnership, and shared decision-making) are expected but not always achievable in teams (Collin et al., 2015). Some problems stem from unbalanced workloads (Neal & Lyons, 2020). Despite efforts to implement interprofessional collaboration, organizations are often faced with heavy client caseloads, grant applications, and new programs and demands (Bernard & Goodyear, 2004). In addition, challenges can arise in interprofessional collaboration due to the operational environment (Collin et al., 2015).

In a cross-sectional descriptive study, Prentice et al. (2016) examined staff perceptions of interprofessional collaboration in a newly formed 30-bed medical interprofessional education unit in Ontario, with the results helping define and develop educational strategies. The study consisted of three regional academic partners: two universities and a community college offering training in nursing, medicine, occupational therapy, physiotherapy, and assistant programs. Nineteen of the 54 staff members completed the AITCS, yielding a response rate of 35%. Respondents included 11 registered nurses (57.9%), three registered practical nurses (15.8%), and five allied health professionals (26.3%). The mean age was 38, and 59% were employed full time. On average, they had 14 years of work experience, ranging from two months (new graduates) to 41 years. The study found many areas of teamwork that needed to be addressed. Respondents felt they did not have enough time for team reflection or to make changes to the

team processes. Additionally, they respected each other but felt they needed more organizational support to further develop team skills.

Zakaria et al. (2016) researched a city council in Malaysia via 300 distributed questionnaires, 202 of which were completed. The study used a cross-sectional design, with Likert-scale questions measuring perceived organizational performance. Daily operational practices and procedures consisted of design, management, planning, and coordination of resources, which outlined expectations in the organization. Operating practices that were not clearly defined and established could have negative effects on staff. Emotional and psychological problems were associated with lower professional integrity when servicing vulnerable populations without effective collaboration (the purview of rehabilitation counselors). The study suggested that management should make a stronger commitment to improving practices and procedures by promoting effective collaboration.

Kurtz (2008) noted that the overall climate of an organization is another major factor. Organizations that have a shared history, set clear expectations about job duties, observe ethical obligations, and value everyone, are less likely to have negative experiences with burnout. Conversely, organizational factors that can negatively influence work performance include increasing job demands, lack of employee support, lack of performance feedback, limited opportunity for growth, lack of support for shared knowledge, and unclear job duties (Collin et al., 2015; Farsi et al., 2021).

Research on organizational climate has highlighted how culture, staff and client-staff relationships, leadership styles, work environment, management, communication, and lack of support all influence those rendering direct services (Lindberg & Meredith, 2012; Newell & MacNeil, 2010). Cultural norms and expectations in an organization influence how employees

approach their duties and priorities. McLennan et al. (2018) conducted a qualitative study about ethical dilemmas with a group of rehabilitation counselors. Despite ethical challenges in practice, ethical codes had no impact on decision-making and the ability to resolve dilemmas without relying on their own judgement. The results of this study indicated that rehabilitation counselors who work in the private sector are more at risk for work-related stress and ethical conflict. Overall, the study supported the relationship between organizational culture, workplace climate, and ethical stress among rehabilitation counselors. In addition, some participants might have felt their employers did not support their ethical standards and thus could have been hesitant to disclose ethical issues encountered in the workplace by collaborating with others.

In a descriptive study, Nandi and Büyüközkan (2013) explored the effects of burnout on organizational citizenship behavior among 1,699 teachers (930 female, 769 male) in public primary schools. Data were collected using the Organizational Citizenship Behavior Scale and the Maslach Burnout Inventory. The study found a significant negative relationship between the altruistic teacher behavior of organizational citizenship, emotional exhaustion, and depersonalization. Organizational citizenship affected burnout at a low level, but burnout could still have a negative effect on teachers, their students, and work conditions.

Khan et al. (2020) explored the influence of workload on burnout dimensions, especially emotional exhaustion. Data were collected through a cross-sectional questionnaire (the Oldenburg Burnout Inventory) in Khyber Pakhtunkhwa, Pakistan, with participants being largely male (70.1%). The overall level of emotional exhaustion among employees was higher in the teaching profession. Teachers' work-related burnout was related to limited job resources, emotional exhaustion, and high work demands stemming from large class sizes, with higher workload leading to higher emotional exhaustion.

Generally, studies have shown favorable results for interprofessional collaboration as a means to prevent work-related burnout, but this is not always the case. McCarthy (2021), for instance, studied two sets of social workers: those who practiced interprofessional collaboration and those who did not. Interprofessional teams reported lower work-related burnout scores, but there was no significant relationship between working in an interprofessional team and work-related burnout.

COVID-19 and Interprofessional Collaboration

Prior to COVID-19, researchers explored collaboration to achieve the best possible outcomes for clients (Ulrich, 2021). According to the WHO (2021), partnerships include various organizational structures and relationships to further collaboration and thereby achieve healthy outcomes. Partnership is governed by standards that demonstrate a clear vision and goals (WHO, 2021), while professional dialogue informs judgement and enhances treatment (Payne, 1989). Collin et al. (2015) highlighted how organizations that value ongoing supervision, time management, accountability, collaboration, and clearly defined roles experience fewer problems with work-related burnout.

Interprofessional primary care teams provide comprehensive coordinated care and are equipped to support those most at risk to adverse health outcomes during the COVID-19 pandemic (Donnelly et al., 2021). Donnelly et al. (2021) used an observational cross-sectional design to survey 473 non-physician providers in Ontario. Participants came from 12 disciplines, with social workers (25%) being the largest, followed by dietitians (22%) and nurses (12%). Almost half (48.3%) reported experiencing greater team collaboration since COVID-19, with collaboration most frequently supported by email and phone. Collaboration and communication within teams has been shown to be critical in supporting integration and coordinated care.

Alderwick et al. (2021) examined collaboration between local healthcare and non-healthcare organizations in terms of how policymakers in many countries promoted this collaboration. The overall aim was to understand the factors affecting the success of interprofessional collaboration in organizational settings. They carried out a systematic review of 26 studies to synthesize evidence on relevant factors. Some studies included data on collaboration with broad population health goals, such as preventing disease and reducing health disparities. Others focused on collaboration with a narrower focus, such as better integration between health and social services. This systematic review offered little evidence to suggest collaboration between local healthcare and non-healthcare organizations improved health outcomes, and evidence of the impact on health services was mixed.

Lincoln et al. (2021) examined how structural changes affected interprofessional collaboration, supervision, and patient safety in medical wards and ICUs at St. James Hospital in Dublin. The questionnaire was distributed to doctors at the height of the first wave of COVID-19. They were asked to compare their sense of collaboration prior to and during the pandemic. Thirty-three out of 53 doctors found that collaboration during the pandemic was better or much better and had improved through better work patterns and increased efficiency.

As the COVID-19 pandemic has reduced the availability of many professionals, it would not be surprising to find that professionals were challenged in defining their new roles, new hierarchical structures, and how to function and engage with others. These stresses may have reduced levels of interprofessional collaboration. Nevertheless, such collaboration is recommended as a way of providing holistic care since team members' specialized training, skills, experience, and knowledge—when pooled together—can make significant contributions to patient care (McDonough & Doucette, 2001; Xyrichis & Lowton, 2008). Common

interprofessional barriers include sex and class differences, hierarchical organizational structures, professional titles, and levels of education (Neiezen & Mathijessen, 2015).

Researchers have highlighted the challenges to establishing new methods of implementing a team-based approach; such an approach would typically involve creating a more balanced job effort and reward system, increasing social support, and clarifying roles to reduce the effect of work-related burnout (Gandi et al., 2011). However, underlying risk from the pandemic among frontline workers has been increasaed by inadequate training, protocols, knowledge, and personal protection equipment, in addition to weak health systems, slow national responses, and poor leadership (Chen et al., 2020). Chen at al. (2020) explored how organizations were forced to establish and implement their own procedures with little experience or guidance, leading to challenges from chronic work-related stress and eventually burnout.

According to the CDC (2021), individuals with disabilities have an increased risk from COVID-19 due to limited mobility, difficulties comprehending preventative measures, and trouble communicating symptoms. This, in turn, has caused additional challenges for clients and rehabilitation counselors. Therefore, it is important to explore methods to prevent work-related burnout among these counselors and encourage a balanced, team-based approach to provide strong service delivery (Babur & Liaqat, 2017).

Measuring Interprofessional Collaboration

To examine the influence of professional collaboration, the present study employed the AITCS, a 47-item questionnaire with four subscales: partnership, cooperation, coordination, and shared decision-making (Orchard et al., 2012). This diagnostic instrument was designed to measure the interprofessional collaboration among team members working together to explore

new methods and interventions (see Appendix B). The scale is a reliable, valid instrument that can be applied in a variety of settings (Nichols, 2021; Topperzer et al., 2020).

Reliability refers to the consistency of an instrument when test procedures are repeated on a specific population (Orchard et al., 2012). The reliability of AITCS has been tested by analyzing its internal consistency and test-retest stability (Topperzer et al., 2020). The internal consistency of a scale is the measure of the degree to which different items intended to measure the same characteristics (Orchard et al., 2012) should be highly correlated with each other (Hellman et al., 2016). Cronbach's alpha has been used to determine the instrument's internal consistency, with scores above 0.70 considered acceptable (Taperer et al., 2020). The constructs of patient-centered professional collaboration as defined by Orchard et al. (2012) were integrated into each of the subscales. Items are measured on a 5-point Likert scale (5 = always, 4 = most of the time, 3 = occasionally, 2 = rarely, and 1 = never), allowing participants to rate their current feelings about their team and themselves as team members.

The AITCS has shown internal consistency, reliability, and construct validity (Orchard et al., 2012). A major strength is its unique capacity to evaluate collaboration within various professions that involve teamwork (Orchard et al., 2018). In addition, it can easily be administered in 10–15 minutes. Furthermore, few other instruments have been developed to assess the quality of collaboration, and the AITCS can be used to measure cultural shifts among professionals who provide direct care to clients (Orchard et al., 2012). To fully understand interprofessional collaboration, one must also understand the four components that the AITCS measures.

Coordination

Coordination is the act of working together to achieve shared goals (Morley & Cashell, 2017). Malone and Crowston (1994) theorized that well-coordinated activities and processes would result in efficient use of time, effort, and resources; standardization of procedures leading to quality outcomes; rapid response times; and a good reputation. Coordination involves methods that highlight the importance of care-planning activities created with and for team members. For example, effective coordination is essential when different individuals and organizations need to determine how much time and resources to employ when rendering services (Orchard et al., 2012). Effective interprofessional collaboration promotes high levels of coordination among team members, helping them work together.

In a qualitative study, Pennanen and Mikkola (2016) sought to understand social interactions by analyzing how work coordination was constructed within an organization. They concluded that coordination consisted of managing actions, emotions, and relational problems and could create a more cohesive environment that promoted open communication, understanding of roles, respect, and appreciation among professionals. In the present study, the concept of coordination reflected the ability of a team to establish effective working relationships to meet their needs and attain mutual goals, resulting in positive outcomes for clients.

Cooperation

Bearing some similarities to coordination, cooperation is the ability to contribute to the team and understand the importance of others' contributions (Morley & Cashell, 2017). Cooperation is an aspect of interprofessional collaboration that involves professionals working together to achieve a goal. Such collaboration benefits staff and the entire organization by creating a healthier, more supportive atmosphere (Payne, 1989). This can increase satisfaction

and staff retention by enhancing performance measures (Babur & Liaqat, 2017). Cooperation involves acknowledging and respecting the opinions and viewpoints of others while maintaining the willingness to examine and change personal beliefs and perspectives (Topperzer et al., 2020).

Sampson and Marthas (1977) identified nine key cooperative attributes: clearly defining goals, priorities, roles, and responsibilities; support for self-reflection and self-awareness; leadership; group dynamics; communication guidelines; and care processes. Cooperation may be viewed in opposition to the traditional concepts used for professional autonomy, which allows for the development of new understandings of boundaries between each other's practices and how joint expertise can enhance teamwork (Orchard et al., 2012). Limited knowledge of other professionals' understanding, skills, and abilities coupled with competitiveness between team members can result in distorted communication and conflicts in roles and goals; this in turn can impede coordination and the ability to focus on a client's needs within a trusting, supportive environment (Hellman et al., 2016). Cooperation thus requires professionals to work together in an environment where each person's skills, knowledge, and expertise are valued and sought out (Orchard et al., 2012).

Research has highlighted how cooperation involves the perception of attitudes among staff members (Freund & Drach-Zahayy, 2007). Rehabilitation counseling is founded on professional cooperation with a need to work toward understanding, communication, and cooperation in order to promote the welfare of individuals with disabilities. Therefore, cooperative behavior among professionals is often manifested in the willingness to work with others when assistance is not demanded (Morley & Cashell, 2017). Cooperation has proven to be the most important commitment in an organization and vital to rehabilitation counselors (Freund

& Drach-Zahavy, 2007). However, identifying the conditions conducive to cooperative behavior can require additional knowledge and skills during a crisis, such as a pandemic.

Shared Decision-Making

Shared decision-making relies on openness, trust, communication, and respect within an organization (Morley & Cashell, 2017) to achieve healthy client outcomes (de las Cuevas et al., 2020; Morley & Cashell, 2017). Orchard et al. (2012) suggested that shared decisions improve in quality when teams have adequate information and the interprofessional knowledge to interpret that information. Communication is thus a critical component of shared decision-making (Morley & Cashell, 2017). In this process, healthcare providers consider outcome probabilities and patients' preferences to reach a decision based on mutual agreement (Hellman et al., 2016). According to Hellman et al. (2016), this type of decision-making includes the following components: (a) two or more participants are involved, (b) all parties work together and agree to the treatment available, (c) information is shared between all involved individuals, and (d) a collaborative agreement is reached for the treatment to be implemented. Thus, shared decision-making involves a negotiation around the shared input of each team member and the client (Orchard et al., 2012).

Hobfall et al. (2021) assessed 373 therapists' self-reported knowledge and attitudes about shared decision-making in an organization. Over 60% indicated that making decisions together was vital. The main perceived barriers were patient knowledge, skills, confidence, and time constraints. Over 79% were willing to learn more about shared decision-making to improve practices and prevent work-related burnout.

Partnership

Partnerships involve mutually respectful relationships that help professionals reach common objectives (Morley & Cashell, 2017). They can help with bringing together skills, sharing information, ensuring continuity of care, and planning resource delivery (Glasby & Lester, 2004). As such, they are widely embraced in organizations to provide support (Loban, 2021) and include respect for the role and contributions of clients (Orchard et al., 2012). Trust is a core element in partnerships and has been correlated with team members' levels of experience and competence (Orchard et al., 2012). Partnership involves sharing responsibilities between parties, shared decision-making, and shared planning for interventions in order to share different perspectives (Topperzer et al., 2020). This process requires open and honest communication; mutual trust and respect; and valuing the work, experience, and perspectives of all parties (Orchard et al., 2012).

CHAPTER 3

METHODOLOGY

This chapter outlines the methodology of the study, including its objectives, research questions and hypotheses, study design and variables, participants, data collection, and data analysis.

Objectives

This study had the following objectives:

- To promote awareness of emotional exhaustion and depersonalization among rehabilitation counselors.
- To promote awareness of interprofessional collaboration.
- To explore the potential influence of demographic factors (age, gender, hours worked, years of experience, level of education, COVID-19 experience) on work-related burnout during the COVID-19 pandemic.
- To promote awareness of how interprofessional collaboration is connected to burnout during a pandemic.

Research Questions and Hypotheses

Based on the objectives, this study was guided by the following research questions:

1. Is there a relationship between interprofessional collaboration and work-related burnout among rehabilitation counselors during the COVID-19 pandemic?
2. Is there a relationship between age, gender, years of experience, or level of education and work-related burnout among rehabilitation counselors during the COVID-19 pandemic?

These questions generated the following null and alternative hypotheses:

H_{01}: There is no significant relationship between interprofessional collaboration and work-related burnout among rehabilitation counselors during the COVID-19 pandemic.

H_{a1}: There is a significant negative relationship between interprofessional collaboration and work-related burnout among rehabilitation counselors during the COVID-19 pandemic.

H_{02}: There is no significant relationship between age, gender, hours worked, years of experience, level of education, COVID-19 experience, and work-related burnout among rehabilitation counselors during the COVID-19 pandemic.

H_{a2}: There is a significant relationship between age, gender, hours worked, years of experience, level of education, COVID-19 experience, and work-related burnout among rehabilitation counselors during the COVID-19 pandemic.

Research Design

A quantitative survey was employed because it allowed the researcher to make inferences about a given population from a sample (Setia, 2016). This study used a multiple regression correlational design to establish the degree to which collaboration influenced levels of reported work-related burnout among counselors. In other words, it asked whether a linear relationship existed between variables X and Y. The regression model included one dependent variable (work-related burnout) and multiple independent variables (e.g., X1, X2) that included interprofessional collaboration and demographic variables of age, gender, hours worked, years of experience, and COVID-19 experience.

Multiple regression is a major method of statistical analysis in this field and is used to predict scores for variables based on other variables (Huck, 2004). Regression is a technique to

describe the relationship between variables (Stolzenberg, 2004). The purpose of this analysis is to find an equation that best predicts the dependent (Y) variable as a linear function of the independent (X) variables and to explore the relationships between several independent or predictive variables (ACITS and COVID-19 questions) and a dependent variable (burnout). All analyses were performed at a significance level of 0.05. Multiple selection coefficients, such as the value of R^2 and the *F*-test, were analyzed through SPSS to understand how and whether demographic variables were related to work-related burnout.

Three assumptions need to be met for multiple regression analysis to be employed (Williams et al., 2013). The first is normality, with an assumption that residuals are normally distributed (Stolzenberg, 2004). The dependent variable should come from a population that is normally distributed. The second is linearity. Some tests, such as regression, require a linear relationship between dependent and independent variables (Huck, 2004). The researcher must check for outliers in general, and linearity can be tested graphically. Huck (2004) discussed how scatterplots can be used to discover the linearity assumption, in addition to other techniques explored in correlation and regression to show whether there is a linear relationship. The third is the assumption of homoscedasticity, where errors are generally assumed to have an unknown and finite variance that is constant across all levels of predictor variables; this assumption is violated when heteroscedasticity is reported, leading to Type I errors (Huck, 2004).

Participants

The study collected a convenience sample of 126 men and women employed as rehabilitation counselors during the COVID-19 pandemic between March 2020 and March 2022. Participants were employed in various capacities (e.g., supervisor, private practice, caseworker) as long as they provided direct care to clients. A statistical power analysis was performed to

estimate sample size using G*Power, a program common in the social, behavioral, and biomedical sciences (Erdfelder et al., 2007). Required sample size depends on several factors, including chosen power, alpha level, number of predictors, and predicted effect size. These calculations produced the following outcomes: a .15 small effect size, a 0.05 alpha level, and a statistical power level of $1 - \beta$ of 0.95 is equal to 74 participants when a one tailed test is employed (see Figure 1), so a target of 100 participants was chosen to offset any missing or unusable data.

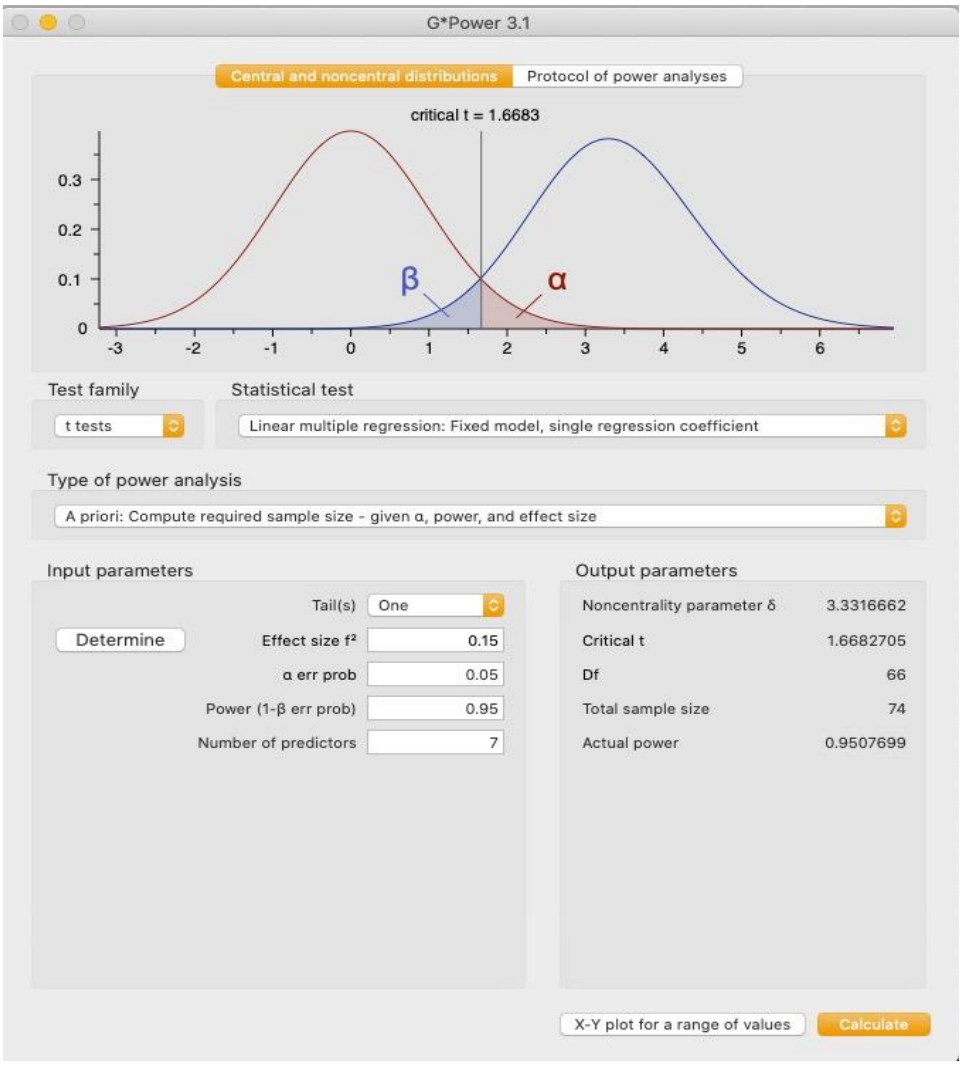

Figure 1

*G*Power Results*

With permission from the SIU Office of Human Subjects, a nationwide call for participants was made. Participants had to be at least 21 years of age and employed on a part-time or full-time basis. They were recruited by email invitations distributed through the listservs from a professional organization for counselors providing direct service care (see Appendix C): the Commission on Rehabilitation Counselor Certification. Participants were asked to complete the survey only once, and duplicated names were merged. Participants had the opportunity to be in a random drawing for one person to win a $25.00 gift card for participation. Before taking the survey, participants received information describing the purpose and nature of the study, explaining that all responses would be confidential, that they would remain anonymous, that their participation was voluntary, and that they could stop participating in the survey at any time (see Appendices D and E). Once a participant gave consent, they were directed to begin the survey.

The following table shows the years of experience of the 144 participants (122 females and 22 males). The skew coefficient for both distrubutions fell within acceptable limits suggesting years of experience were normally distributed for males and females.

Table 1

Years of Experience by Gender for a sample of 129 Rehabilitation Counselors

Yrs Exp	Female	Male
1-8	37	7
9-16	29	1
17-24	13	4
25-34	17	4
33-40	6	6
41-48	1	4
49-56	0	1

Table 2

Mean Scores and Standard Deviations for Surveys of Covid-19, Burnout (Depersonalization, Emotional Exhaustion, and Personal Accomplishment), and Collaboration for 124 Rehabiliation Counselors by Gender

	Females (N=102)		Males (N=22)	
Name	Mean	S	Mean	S
Covid-19 Score	1.167	.247	1.0455	.155
Depersonalization	1.1000	1.18	1.9545	1.42
Emotional Exhaustion	3.0967	1.28	3.0152	1.28
Personal Accomplishment	4.0928	.673	3.8636	.748
Professional Collaboration	3.6569	1.19	4.0909	.971

On Covid-19 scores, the female mean was significantly higher than males (t=2.96, p=.005) indicating that females may have been more worried about adjusting to the pandemic than males. The depersonalization mean scores for females was significantly lower than the mean scores for males (t=-2.63, p=.014) indicating that males reported more depersonalization than females. There was no significant difference between males and females on the measure of emotional exhaustion, personal accomplishment, or professional collaboration (t=.27, p=.79; t=1.33, p=.66, t=-1.82, p=.077, respectively).

Table 3

Mean Scores and Standard Deviations for Surveys of Covid-19, Burnout (Depersonalization, Emotional Exhaustion, and Personal Accomplishment), and Collaboration for 124 Rehabiliation Counselors by Years of Experience and Employment Status

	Years of Experience		Employment		
Name	High	Low	Full-Time	Part-Time	Self
	M S	M S	M S	M S	M S
Covid-19 Score	1.16 (.26)	1.17 (.195)	1.14 (.23)	1.33 (.33)	1.16 (.27)
Depersonalization	1.33 (1.41)	1.16 (1.06)	1.19 (1.21)	2.20 (2.4)	1.46 (1.39)
Emotional Exhaustion	3.17 (1.3)	2.95 (1.19)	3.15 (1.28)	3.37 (2.1)	2.58 (1.06)
Personal Accomplishment	4.15 (.65)	3.94 (.73)	4.01 (.70)	4.17 (.19)	4.01 (.70)
Professional Collaboration	3.68 (.919)	3.65 (1.09)	3.78 (1.05)	3.38 (.54)	3.82 (.96)

A total of 126 certified rehabilitation counselors who were employed during the pandemic completed the survey. Gender reported for this sample was 80.3% (*N*=102) female, 17.3% (*N*=22) male, and 0.8% (*N*=1) other, with two (1.6%) failing to answer (see Figure 2). The demographics of age (*M*=35, *SD*=5) and years of experience (*M*=15, *SD*=3) were normally distributed.

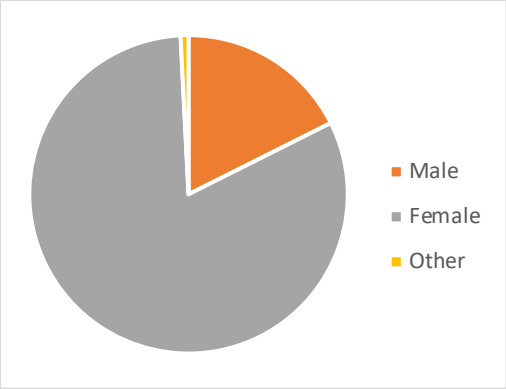

Figure 2

Gender

Regarding employment status (see Figure 3), 106 reported working full-time, 3 part-time, 17 self-employed, and 1 skipped this question.

Table 4

Employment Status of 126 Rehabilitation Counselors

Employment	*N*	Percent
Full-Time	106	84.1%
Part-Time	3	2.4%
Self-Employed	17	13.5%
Total	126	

There was little variation in the level of education for this sample as can be seen in the table below.

Table 5

Education Level of 126 Rehabilitation Counselors

Degree	*N*	Percent
Certificate	1	0.8%
Bachelor's	3	2.4%
Master's	114	90.5%
Doctorate	8	6.3%
Total	126	

Procedures

The study's procedures were reviewed and approved by the Internal Review Board of Southern Illinois University (see Appendix F) before data collection. The MBI-HSS and demographic survey were made available on SurveyMonkey. Contact information for the participants was collected from the Commission on Rehabilitation Counselor Certification, which provided a listserv containing approximately 2,000 rehabilitation counselors. A link was generated by SurveyMonkey to access the survey. A second email was sent within one week to participants who had not completed the survey after the initial email. A total of 126 participants completed it. Survey data were input into Excel and SPSS (Version 23).

Instruments

Maslach Burnout Inventory–Human Services Survey (MBI-HSS)

The MBI-HSS (see Appendix A) was employed to assess work-related burnout in human services (Maslach et al., 2010). As noted in the literature review, this scale evaluates three purported dimensions (emotional exhaustion, depersonalization, and lack of personal accomplishment) through 22 items (nine for emotional exhaustion, five for depersonalization, and eight for personal accomplishment) on a 7-point Likert scale. Higher scores on the emotional exhaustion and depersonalization subscales indicate higher burnout, whereas higher scores on personal accomplishment indicate lower burnout.

For each item, the respondent may choose 0 = never, 1 = a few times a year or less, 2 = once a month or less, 3 = a few times a month, 4 = once a week, 5 = a few times a week, or 6 = every day (Maslach et al., 2010). The entire survey should take 10–15 minutes to complete. Examples of items are "I feel emotionally drained from work" and "I can effectively solve the problems that arise in my work."

The MBI-HSS is an accepted measure for evaluating individuals working with people who have intellectual disability or dementia (Chao et al., 2011). According to Chao et al. (2011), it is the best measure for distinguishing between work-related burnout and other mental health syndromes, such as depression or anxiety. Lent and Schwartz (2012) examined the external and internal factors that can affect burnout. Approximately 340 professionals completed an online MBI-HSS and the International Personality Item Pool. Results indicated that working in community mental health settings may result in increased burnout.

The MBI-HSS has shown to be effective at measuring psychometric qualities in English-speaking countries (Beckstand, 2002) and has a stable factor structure for use in the human services sector (Bakker et al., 2010). According to Schaufeli et al. (2001), the psychometric quality of the MBI-HSS continue to be consistent and valid. Maslach and Jackson (1981) investigated the performance of the three MBI-HSS subscales and demonstrated that they all had good psychometric properties with a Cronbach's alpha for all three subscales above 0.70. Job characteristics expected to contribute to burnout, such as difficult workloads and job dissatisfaction, have shown correlations with work-related burnout subscales (Poghosyan et al., 2009), suggesting convergent validity for this measure (Maslach & Jackson, 2010).

However, some researchers have conceptualized work-related burnout as having a two-factor structure that includes only emotional exhaustion and depersonalization, viewing it as a unidimensional phenomenon (Poghosyan et al., 2009). Poghosyan et al. (2009) concluded that studies of work-related burnout had neglected to investigate the performance of this instrument in other countries, studies lacked representative samples of nurses, and some multi-country studies used data derived from different research protocols, failing to measure the latent construct and yielding low loadings on the factors or cross-load.

Assessment of Interprofessional Team Collaboration Scale (AITCS)

The AITCS was developed to provide a quantifiable tool to allow teams to assess their level of collaborative practices (Orchard et al., 2012) and was used for this study (see Appendix B). It reflects the three key components of cooperation (coordination, cooperation, and shared decision-making/partnerships) identified by Snyder (2008) and others (e.g., Bridges et al., 2011; Molyneux, 2001). Permission was received from the survey developers before conducting the study.

The AITCS is a psychometrically sound measure of interprofessional team collaboration., It is a reliable instrument with robust internal consistency for each of the subscales as measured by Cronbach's alpha. The overall reliability for the scale is .98, and the reliability for subscales ranges from .80 to .97 (Nichols, 2021). The three subscales have a total of 37 variables: coordination (seven items), cooperation (11 items), and partnership/shared decision-making (19 items). Each item is measured on a 5-point Likert scale (5 = always, 4 = most of the time, 3 = occasionally, 2 = rarely, and 1 = never). The items and rating scale were developed to allow the respondent to rate their current feelings about their team and themselves as a member of that team. Question stems that would evoke such responses (e.g., When we are working as a team, all of my team members…) are included as a lead-in before each section of the instrument.

Because the AITCS was developed for healthcare settings, permission was obtained to alter and expand its demographic descriptors to reflect the type of team arrangement one would typically find in the field of substance use prevention and treatment (Nichols, 2021). These changes affected only the descriptive portion of the instrument, having no effect on the reliability or validity of the survey content itself. For example, occupations in the original demographics section included doctors, physiotherapists, respiratory therapists, and nurses. These were

replaced with job titles in behavioral healthcare, such as case managers, clinical psychologists, and community mental health workers. Respondents were also asked to specify their employment status (full time or part time), years in practice, and years with their current team.

Predictor Variables

The predictor variables were age (at least 21), gender (male, female, other), hours worked, years of experience, level of education, and COVID-19 experience. Participants were asked to provide yes/no answers to the following statements:

1. Our organization implemented appropriate measures in response to challenges presented during COVID-19 and continues to implement appropriate measures so we can work together as a team.
2. I was able to communicate with team members effectively to perform my work duties while adjusting to COVID-19.
3. I felt confident with my ability to adjust to COVID-19 and felt I was prepared for the adjustment.

Data Analysis

The data from the responses were downloaded from SurveyMonkey and analyzed via SPSS (Version 23) to calculate descriptive statistics and conduct the regression analysis. Regression analysis describes how the changes in each independent variable are related to changes in the dependent variable. Regression also statistically controls every variable in the model. To obtain trustworthy regression results, data analysis included checking residual plots to ensure this model fit the data adequately and checking for multicollinearity, that is, any correlation between the independent variables. The predictor variables (age, gender, hours worked, years of experience, level of education, and COVID-19 experience) were measured

using dummy coding, which is used when there are categorical variables to estimate linear regression (Salkind, 2010).

CHAPTER 4

RESULTS

The purpose of this quantitative study was to explore the relationships between rehabilitation counselors' experiences, burnout, and professional collaboration during the COVID-19 pandemic. This chapter describes the sample and presents the findings in relation to the research questions.

Research Question 1

To answer Research Question 1, a correlation analysis was carried out to test for relationships between the measures of each subscale of the AITCS, the scale used to measure interprofessional collaboration, and the measures of each subscale of the MBI-HSS, the scale used to measure work-related burnout among rehabilitation counselors during the COVID-19 pandemic. The three interprofessional subscales were cooperation, collaboration, and shared decision-making. The work-related burnout subscales were depersonalization, emotional exhaustion, and personal accomplishment. To determine whether the computed correlations should be made using the Pearson-Product Moment Correlation or Spearman's Correlation, the normality of the responses from 126 rehabilitation counselors was calculated. The absolute value of the skewness for each of the measures was greater than 1, indicating that Spearman's Correlation was the more appropriate approach (see Table 6).

Table 6

Spearman's Correlations Between AITCS and MBI-HSS Scores

	Decision-Making	Cooperation	Coordination	Depersonalization	Emotional Exhaustion
Cooperation	.816**				
Coordination	.739**	.765**			
Depersonalization	-339**	-.297**	-.201**		
Emotional Exhaustion	-.345**	-.408**	-.370**	.560**	
Personal Accomplishment	.134	.032	.041	.084	.130

Note. *p<0.05, **p<0.01.

The findings showed a significant positive correlation between shared decision-making and cooperation as well as shared decision-making and coordination. There was a significant negative correlation between depersonalization and emotional exhaustion, while there was no significant correlation between shared decision-making and personal accommodation. When categorized into the range of experienced burnout defined by the MBI-HSS, the sample scored at a high level of depersonalization and a low level of personal accomplishment. There were significant relationships between each of the AITCS subscale scores and the depersonalization and emotional exhaustion subscales of the MBI-HSS. There were no significant relationships between these subscales and the personal accomplishment subscales scores.

Research Question 2

Research Question 2 investigated the relationship between age, gender, years of experience, education, COVID-19 experience, and work-related burnout among rehabilitation counselors during the COVID-19 pandemic. If the relationship between each of these independent variables was significant, the combination could be used to predict subscale scores on the work-related burnout measure among rehabilitation counselors during the pandemic. In order to determine the answer to this research question, three regression analyses were carried

out using the subscale scores from the MBI-HSS as the dependent variables. The first regression used depersonalization as the dependent variable and, although the overall model was significant, F (5,117) =5.66, p<.001, the independent variables of age, education, and years of experience were not significantly related to the dependent variable of depersonalization. Gender and COVID-19 experience were significantly related (p<.001). As you can see in Table 7,removing age, education, and experience yielded a regression equation with two independent variables of gender and COVID-19 experience with an adjusted R Square of .16 (standard error of the estimate was 1.17).

Table 7

Results of Regression Analysis of Depersonalization on Gender and Covid-19 Experiences for a Sample of Rehabilitation Counselors (N=126)

Model	Coefficients	Standard Error	*T*	*p-value*
Constant	1.351			
Gender	-1.017	.271	-3.756	<.001
COVID-19 Exp.	1.534	.453	3.388	<.001
Age	NA		NA	n.s.
Education	NA		NA	n.s.
Years of Experience	NA		NA	n.s.

Note:dependent variable is depersonalization

The regression formula is therefore y = 1.351-1.017Gender + 1.534COVID-19.

The second regression used emotional exhaustion as the dependent variable and, although the overall model was significant, F (5,117) =4.9, p<.001, the independent variables of gender, education, and years of experience were not significantly related to the dependent variable of depersonalization. Age and COVID-19 experience were significantly related (p<.001). Removing gender, education, and experience thus yielded a regression equation with two

independent variables of age and COVID-19 experience with an adjusted R Square of .002 (standard error of the estimate was .691).

Table 8

Results of Regression Analysis of Emotional Exhaustion on Gender and Covid-19 Experiences for a Sample of Rehabilitation Counselors (N=126)

Model	Coefficients	Standard Error	*t*	*p-value*
Constant	2.055			
Age	-0.021	.013	-2.393	.0.018
COVID-19 Exp.	1.772	.292	3.913	<.001

Note:dependent variable is emotional exhaustion

The regression formula is therefore y = 2.055-.021Age + 1.772COVID-19

The third regression used personal accomplishment as the dependent variable. This time, the overall model was not significant, F (5,117) =1.054, p=.39.

The next regression used depersonalization as the dependent variable and, although the overall model was significant, F (5,117) =5.66, p<.001, the independent variable of professional collaboration was not significantly related to the dependent variable of depersonalization. Gender and COVID-19 experience were significantly related (p<.001).

Table 9: Results of Regression Analysis of Depersonalization on Gender, Covid-19 Experiences, and Professional Collaboration for a Sample of Rehabilitation Counselors (N=126)

Model	Coefficients	Standard Error	*t*	*p-value*
Constant	1.351			
Gender	-1.017	.271	-3.756	<.001
COVID-19 Exp.	1.534	.453	3.388	<.001
Professional Collaboration	NA		NA	n.s.

Note:dependent variable is depersonalization

The regression formula is therefore y = 1.351-1.017Gender + 1.534COVID-19

The last regression used emotional exhaustion as the dependent variable and, although the overall model was significant, F (5,117) =8.91, p<.001, the independent variable of gender was not significantly related to the dependent variable of emotional exhaustion. Professional collaboration and COVID-19 experience were significantly related (p<.001).

Table 10: Results of Regression Analysis of Emotional Exhaustion on Gender, Covid-19 Experiences, and Professional Collaboration for a Sample of Rehabilitation Counselors (N=126)

Model	Coefficients	Standard Error	*T*	*p-value*
Constant	3.124			
COVID-19 Exp.	-.365	.115	-3.161	.002
Professional Collaboration	1.132	.484	2.339	.021

Note:dependent variable is depersonalization

The regression formula is therefore y = 3.124-1.132 Professional Collaboration -.365COVID-19

CHAPTER 5

DISCUSSION

The purpose of this quantitative study was to explore the relationships between rehabilitation counselors' experiences, burnout, and professional collaborations during the COVID-19 pandemic. The findings contribute to the existing literature related to direct care, work-related burnout, and the influence of collaboration.

Background

A major problem in rehabilitation counseling is work-related burnout, which has been associated with the increased demands and pressures brought about by COVID-19 (Brar & Singh, 2020). The term "burnout" was first recognized by the changes in moods, attitudes, and personalities among volunteers from various professional backgrounds who worked in a high-pressure, low-results, free clinic in the 1970s. According to Freudenberger (1976), it is "a state of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that has failed to produce the expected reward" (p.49).

An email request for participation along with a link to a survey made available on SurveyMonkey was sent to approximately 2,000 certified rehabilitation counselors, addresses of whom were obtained from the Commission on Rehabilitation Counselor Certification listserv. Of that number, 126 certified rehabilitation counselors who were employed during the pandemic completed the survey. The measures included the MBI-HSS and AITCS, and the data revealed statistically significant factors related to burnout.

Previous studies have assessed burnout among counselors and other professionals who provided direct service care, but the present study is the only known study to assess burnout and collaboration among rehabilitation counselors during the COVID-19 pandemic. Although

researchers have investigated burnout in the past (Blau et al., 2013; Maslach & Letier, 2016; Rehder et al., 2021), there continues to be a lack of research on rehabilitation counselors' experiences, professional collaboration, and work-related burnout during the COVID-19 pandemic.

The overall results showed significant relationships between each of the AITCS subscale scores and the depersonalization and emotional exhaustion subscales of the MBI-HSS but no significant relationship with the personal accomplishment subscale.

Research Question 1 asked, "Is there a relationship between interprofessional collaboration and work-related burnout among rehabilitation counselors during the COVID-19 pandemic?" A correlation analysis was carried out to look for relationships between each subscale of the AITCS, which measured interprofessional collaboration, and each subscale of the MBI-HSS, which measured work-related burnout. The three interprofessional subscales were cooperation, collaboration, and shared decision-making. The work-related burnout subscales were depersonalization, emotional exhaustion, and personal accomplishment. As with this study, Nichols' (2021) study in behavioral healthcare likewise found a significant positive relationship between shared decision-making and both cooperation and coordination.

Similar to the higher scores for emotional exhaustion and depersonalization in Maslach (2010), the current study showed a significant positive correlation between depersonalization and emotional exhaustion among rehabilitation counselors during the COVID-19 pandemic. There was no significant correlation between shared decision-making and personal accomplishment. Research Question 2 asked, "Is there a relationship between age, gender, years of experience, or level of education and work-related burnout among rehabilitation counselors during the COVID-19 pandemic?" Similar to Lau et al. (2005), although the overall model in the present study was

significant, the only variables that provided information for the prediction of depersonalization were gender and COVID-19 experience. A regression formula was derived from the analysis of the effect of these variables on the dependent variable of depersonalization. This formula suggests that a female would experience less depersonalization than a male (*b* coefficient= -1.017), whereas the higher the Covid-19 score, the more depersonalization is experienced by both genders.

The second regression formula was derived from the analysis of the effect of age and COVID-19 on the dependent variable emotional exhaustion. Similar to Lau et al. (2005), although the overall model was significant, the only variables that provided information for the prediction of emotional exhaustion were age and COVID-19 experience. Regression of emotional exhaustion on age and confidence in dealing with Covid19, the coefficient on Covid19 is positive which would suggest that greater confidence in dealing with Covid19 is associated with more emotional exhaustion. This makes logical sense because those who are younger would feel more confident in dealing with Covid-19 and therefore feel less exhausted because fewer people in their age group died in comparison to those of older ages, while those of older ages may feel more emotionally exhausted because they saw people of their own age dying in greater numbers. The reason why the scores for the three Covid-19 questions about confidence were related to an increased level of depersonalization and emotional exhaustion may be because the people in this sample may have found that carrying out extra duties and following all of the Covid rules would have amplified the amount of work so much that depersonalization and emotional exhaustion were inevitable.

The last regression formula was derived from the analysis of personal accomplishment as the dependent variable, and the overall model was not significant. This was similar to Maslach

and Jackson (1981), who reported relationships with personal accomplishment to be insignificant.

Limitations

This study was limited by respondents being volunteers from a pool of rehabilitation counselors. The difficulty any researcher experiences with a volunteer group is that there may be some in the group who are volunteering but not completing the screening process honestly, therefore, the sample might not represent the target population of rehabilitation counselors. In addition, making the survey available through a web-based platform could have eliminated the rehabilitation counselors who did not feel comfortable responding electronically, did not have access to a computer, or had visual impairments. In this particular case, the sample size was very small which affects the power of the statistical analysis to detect significant effects. This occurred as a result of listserv emails being incorrect so information did not reach the number of rehabilitation counselors intended. The possible number of respondents that were kept frpm working by pandemic requirements may have hindered participation.

Another limitation was the survey design. Surveys are an efficient way to gather information about behaviors, thoughts, and feelings from a large group, but there are disadvantages to this technique as well. Items written might not encompass a sufficient range of thoughts and feelings to provide adequate knowledge about the topic, respondents might avoid or deny experiences, social desirability might cause a respondent to find it difficult to reveal a weakness, respondents might want to avoid sensing their own feelings of burnout (self-serving bias), items might be misinterpreted by respondents because the wording did not match their reading ability, some might have feared retaliation or lacked interest, forced choice might not provide responses that fit the experience of the rehabilitation counselor, inaccurate recall might

cause response bias, and respondents' lack of awareness of their own thoughts and feelings might cause them to respond randomly (Sallis & Owen, 1999).

Implications

This study explored the relationships between rehabilitation counselors' experiences, burnout, and professional collaboration during the COVID-19 pandemic because these counselors represent an understudied population at risk of burnout. The results suggested a need for heightened awareness of the risks for depersonalization among rehabilitation counselors. Depersonalization is a broad construct that includes negative attitudes about job duties, coworkers, and organizations (Leiter & Maslach, 1988). It is a type of cynicism that defines how people act and perceive others within the organization, which can lead to emotional detachment (Maslach et al., 2001).

This work-related burnout consists of an individual presenting a lack of energy that leads to a maladaptive method of coping (Maslach et al., 2001). Depersonalization or derealization is one's negative, pessimistic attitudes toward others (Bridgeman et al., 2018). It is defined by individuals losing a sense of their identity (Leiter & Maslach, 1988). Maslach et al. (2001) found that depersonalization could lead to maladaptive coping, such as using recreational drugs, difficulties adapting to difficult situations, and severe stressors related to interpersonal life events. These coping skills may cause professionals to distance themselves from their job duties (Maslach et al., 2001).

Emotional exhaustion was found to be another concern for rehabilitation counselors during the pandemic. It is one of the primary indicators of work-related burnout (Leiter & Maslach, 1988), referring to a state of fatigue after sustained depletion of emotional resources (Maslach & Jackson, 1981) and of feeling overwhelmed and emotionally drained (Leiter &

Maslach, 1988; Maslach et al., 2001). One of the primary causes is employees' sense that they have insufficient emotional resources to deal with demands and stressors within their organization (Maslach et al., 2001). Therefore, rehabilitation counselor educators are advised to stress the importance of self-care and discuss the risks of depersonalization and emotional exhaustion along with prevention and remediation techniques. Helping rehabilitation counselors avoid emotional exhaustion and depersonalization would be advantageous for those providing direct service care. Rehabilitation counselors could also consult with their collegues about emotional exhaustion related job roles. Another suggestion is for employers to continue to provide team support to their employees as it relates to additional employee assistant programs to explore their feelings related to the job role, continued efforts to improve organizational tasks that consist of the overall team, and encourage open dialogue among staff to explore improvements of coordination as an effort to improve burnout.

Recommendations for Future Research

Further research on this professional group is needed, although gaining access to large groups of rehabilitation counselors can be challenging. An enhanced understanding of burnout in this population could help supervisors and educators more effectively prepare them to serve their clients. Additional research might include ways interprofessional teams could help counselors provide their direct services and mediate the negative influence of crises.

Conclusion

This study contributes to a greater understanding of the risks associated with rehabilitation counselor burnout during the COVID-19 pandemic. These counselors represent an understudied population at risk of burnout, especially regarding burnout's relationship to collaboration. Prior research has established how burnout can occur at the individual and

organizational levels and that those who provide direct care carry a greater risk of burnout (Salvador et al., 2021), which might be reduced by interprofessional collaboration (Collin et al., 2015).

This study indicated that rehabilitation counselors who provided direct service care during the COVID-19 pandemic experienced the burnout symptoms of depersonalization and emotional exhaustion. Organizations can utilize this finding to better protect these counselors by implementing additional measures to reduce work stressors and demands. Stressors associated with the pandemic can impede coping used by counselors when providing services (Bishop, 2021). Implementing partnerships that include various organizational structures and relationships may further collaboration and thereby achieve healthy outcomes for both rehabilitation counselors and their clients. Furthermore, implementing and demonstrating a clear vision and goals within the organization and implementing practices that promote ongoing supervision, time management, accountability, collaboration, and clearly defined roles will give counselors experiences that can improve their ability to avoid work-related burnout.

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APPENDIX A

MASLACH BURNOUT INVENTORY

The following provides an example of the Maslach Burnout Inventory scale, including the Likert scale used in this study. For the complete scale, please refer to the following work:

This inventory is designed to assess the perceptions of people for whom you provide your service, care, treatment, or instruction. When answering this survey please think of these people as recipients of the service you provide, even though you may use another term in your work.

Instructions: On the following page are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about *your* job. If you have *never* had this feeling, write the number "0" (zero) in the space before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

0=Never
1= A few times a year or less
2= Once a month or less
3= A few times a month
4= Once a week
5= A few times a week
6= Every day

MBI - Human Services Survey - MBI-HSS:

1.I feel emotionally drained from my work.

2. I have accomplished many worthwhile things in this job. I don't really care what happens to some recipients.

APPENDIX B

ASSESSMENT OF INTERPROFESSIONAL TEAM COLLABORATION

The following provides an example of the Assessment of Interprofessional Team Collaboration scall, including the Likert scale used in this study. For the complete scale, please refer to the following work:

Orchard, C. A., King, G. A., Khalili, H., & Bezzina, M. B. (2012). Assessment of interprofessional team collaboration scale (AITCS): Development and testing of the instrument. *Journal of Continuing Education in the Health Professions, 32*(1), 58-67.

This inventory is designed to assess the level of interprofessional collaboration among a variety of health care teams. Specifically, the tool measures partnership, cooperation, and coordination in a 37-item self-report instrument using a 5 point likert-type scale ranging from always (5) to never (1). The results are meant to provide insight into the strengths and weakness of interprofessional teams in a variety of settings.

The tool measures three factors of interprofessional collaboration:

1. Partnership
2. Cooperation
3. Coordination

APPENDIX C

LETTER

Hello! My name is Sharika Sproling. I am a doctoral student at Southern Illinois University-Carbondale. I know everyone is busy and I appreciate your time in reading this short note. I am conducting a study and I am seeking your help in recruiting participants. The purpose of my study is to explore the relationship between work-related burnout and collaboration during the COVID-19 pandemic. I am seeking your help in recruiting therapists to complete a two-part survey that includes questions and nine demographic questions. The survey takes on average 15 minutes to complete and volunteers only participate once.

I need your assistance to make my study information available to rehabilitation professionals. The study is conducted online at SurveyMonkey. All responses will be anonymous and there is no personally identifiable information being requested. If you are willing to distribute the announcement for the survey to your employees/constituency, could you please provide a short note to me indicating that you agree to do so? I need to provide this letter to the SIU Human Subjects Review Board. An email letter is just fine and I am happy to send a template if you want one.

Any feedback is welcome, as this is valuable to my learning. Any questions about this study can be directed to me at mailto:amy.rogers@siu.edu or 501-690-0875 or Sharika.Sproling@gmail.com or to my dissertation chair, Jane Nichols, associate professor and program director for the Counseling and Rehabilitation Education Program, at jlnichols@siu.edu or 618-453-8291. I thank you in advance for your willingness to participate and for taking the time to review this letter.

Sharika Sproling

APPENDIX D

CONSENT NARRATIVE FOR SURVEYMONKEY SURVEY

Hello, my name is Sharika Sproling, and I am doctoral candidate at Southern Illinois University Carbondale. You are invited to participate in a web-based online survey on your experiences during the COVID-19 pandemic, related to work-related burnout and collaboration. Your time and your responses are valuable to our work in this area. This is a research project being conducted by Sharika Sproling, under the supervision of Dr. Jane L. Nichols, Associate Professor at SIU Carbondale. The following survey should take approximately 15 minutes to complete. I know your time is valuable and I thank you for participating if you choose to do so.

PARTICIPATION

Your participation in this survey is voluntary. You may refuse to take part in the research or exit the survey at any time without penalty. You are free to decline to answer any particular question you do not wish to answer for any reason. If you log on but decide not to participate in the survey, Qualtrics will send you to an exit screen. If you have started the survey and choose not to continue, just close the screen to exit the survey. Any incomplete surveys will be automatically removed from Qualtrics and the survey data will not be used in the study.

BENEFITS

You will receive no direct benefits from participating in this research study. However, your responses may help us learn more about the impact of virtual psychotherapy on the working alliance in clinical settings.

RISKS

There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life.

CONFIDENTIALITY

I am using Qualtrics as the survey platform. Your responses will be stored in a password protected electronic format. Qualtrics does not collect identifying information such as your name, email address, or IP address. Therefore, your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether you participated in the study. If you choose to withdraw from this study at any time, and have any questions about whether your information is being included, please contact Sharika Sproling or Jane L. Nichols via email or phone. We will assure that your information has been removed and deleted from the data and that it will not be used in the study.

CONTACT

If you have questions at any time about the study or the procedures, you may contact Sharika Sproling via email at Sharika.Sproling@gmail.com, or Dr. Jane L. Nichols, at jlnichols@siu.edu. This project has been reviewed and approved by the SIUC Institutional Review Board. Questions concerning your rights as a participant in this research may be addressed to the committee chairperson, Office of Research Compliance, SIUC, Carbondale, IL 62901. Phone (618)453-4534. E-mail: siuhsc@siu.edu.

APPENDIX E

IRB APPROVAL LETTER

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INSTITUTIONAL REVIEW BOARD

OFFICE OF RESEARCH COMPLIANCE

WOODY HALL - MAIL CODE 4344

900 SOUTH NORMAL AVENUE
CARBONDALE, ILLINOIS 62901

To: Sharika Sproling
From: M. Daniel Becque
Chair, Institutional Review Board

Date: January 31, 2022

Title: *Relationship between Rehabilitation Counselors' experiences, burnout, and professional collaboration during the COVID-19 pandemic.*

Protocol Number: 22010

The SIUC Institutional Review Board has approved the above-referenced study. The study is determined to be exempt according to 45 CFR 46.101(b)2. This approval does not have an expiration date. However, any future modifications to your protocol must be submitted to the IRB for review and approval before implementation.

The IRB requests updates on exempted studies every three years. Failure to file a project update report may lead to the premature closure of your protocol.

When your study is complete, please fill out and return a study close-out form. A study is considered complete when you are no longer enrolling new participants, collecting or analyzing data.

Best wishes for a successful study.

This institution has an Assurance on file with the USDHHS Office of Human Research Protection. The Assurance number is FWA00005334.

MDB:sk

cc: Thomas Upton

VITA

Graduate School
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Sharika L. Sproling

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Arkansas State University
Masters of Rehabilitation Counseling, May 2013

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Dissertation Title:

The Relationship between Burnout and Professional Collaboration among Rehabilitation Counselors during the COVID-19 Pandemic

Major Professor: Dr. Upton

Publications:

Davis, S. J., & Sproling, S. (2012). Research to practice gap in rehabilitation counseling. *Rehabilitation Counselors and Educators Journal*, *6*, 103–108.