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Impact of Workplace Spirituality on Turnover Intention, Employee Engagement, and Job Satisfaction: An Empirical Study on Allied Health Care Professionals in the United States

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by

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Dedication

This research is dedicated to my father, Desmond Burnett, who transitioned in 2022 but paved the way and provided the foundation needed and the mental fortitude to attend college and pursue my dreams. All things are possible with God. I thank God that He allowed me to be the first in my immediate family to obtain a doctoral degree. In closing, I dedicate this degree to all the allied healthcare workers who are the backbone of the healthcare team and continue to feel a sense of purpose and connectedness to the work you do.

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Abstract

Healthcare organizations may experience high expenses, turnover costs, and low morale, which may limit their ability to keep allied healthcare employees engaged and satisfied, resulting in high turnover. Yet, little is understood concerning the impact workplace spirituality may have on job outcomes such as turnover intention, job satisfaction, and employee engagement among allied healthcare workers in the United States. Job embeddedness and social exchange theories guided this study. An online survey incorporating workplace spirituality, turnover intentions, job satisfaction, and employee engagement was administered to 133 United States allied healthcare employees. Descriptive and inferential analyses were used to describe the data and determine the relationships between the variables. Results from this study indicated that workplace spirituality was associated with increased job satisfaction and employee engagement and decreased turnover intention among the participants. The findings of this study contribute to positive organizational and societal transformation by illustrating to healthcare leaders, administrators, and human resources managers that workplace spirituality seems likely to be associated with positive outcomes for employees and the organizations. Enhancing workplace spirituality could reduce problems faced in retaining skilled and qualified healthcare workers who are paramount to healthcare organizations' productivity and welfare.

Keywords: workplace spirituality, turnover intention, job satisfaction, employee engagement, allied healthcare workers

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Chapter 1: Introduction

Healthcare systems can experience a scarcity of workers due to staff attrition (Zaheer et al., 2019). The loss and replacement of healthcare professionals threaten organizational performance and increase organizational costs (Mahoney et al., 2020). In addition, the U.S. Department of Health and Human Services Health Resources and Services Administration (2020) estimated that in the year 2020 and beyond, some allied healthcare fields would experience as much as a 50% surge in requirements for workers, increasing the competition for skilled allied healthcare workers. Allied healthcare workers include healthcare professionals other than physicians and nurses, such as emergency medical technicians and pharmacists.

Snavely (2016) acknowledged that due to an aging population, there was an increase in the demand for allied healthcare workers to ensure safe healthcare delivery to the required standards. Dempsey and Reilly (2016) expressed that many healthcare leaders struggled with healthcare worker shortages associated with losses in work engagement and satisfaction with jobs. In addition, losing healthcare workers to other organizations and industries where workers seek better opportunities is a concern (Vermeir et al., 2018).

Ashmos and Duchon (2000) defined workplace spirituality (WS) as a "shared understanding that allows employees to tap into their inner purpose and nourishes their connection to meaningful work within the community and connection with coworkers" (p. 137). Studies regarding the contribution of WS in business organizations suggest that WS can enhance employees' engagement (EE) and desire to remain with their organization (Iqbal et al., 2018; Sharma & Kumra, 2020). Sony and Mekoth (2019) also recognized the importance of spirituality in addressing low job satisfaction (JS). Few studies have investigated WS's impact on variables

like JS, EE, and turnover intentions (TI) among allied healthcare employees in the United States (Dado et al., 2019; Dhiman & Arora, 2018), which was the focus of the present study.

The present study examined the relationship between WS and three job outcomes: EE, JS, and TI. Healthcare leaders can use the results of this study to increase the satisfaction, engagement, and retention of allied healthcare workers, which may benefit healthcare organizations, employees, and patients.

Background of the Study

Following World War II, high healthcare demand and soaring costs led to a healthcare evolution outside of classic hospital establishments. As a result, patients received medical care in clinics, physician offices, and community clinics. The health workforce expanded beyond nursing and physician care to a range of narrow supporting, specialized, and adjunctive healthcare professions to strengthen the workforce and expand healthcare, leading to the formation of allied healthcare professionals. The Association of Allied Health Professions was formed in 1967 to improve healthcare workforce quality (Explore Health Careers, 2020).

The healthcare system is comprised of a variety of professionals who are essential for delivering quality patient care. Allied health professionals constitute over 60% of the U.S. healthcare workforce (Explore Health Careers, 2020) and include professions distinct from medical doctors and nurses. Allied employees provide support, direct patient care, and therapeutic, technical, and diagnostic services (Frogner & Skillman, 2016), such as radiologic technologists, nuclear medicine technologists, mammography technologists, diagnostic sonographers, dieticians, and phlebotomy technicians (Knettle et al., 2021). Rehabilitation, treatment, diagnosis, transmission, and disease prevention to maintain and restore social,

cognitive, psychological, and physical functions rely heavily on the knowledge of allied healthcare professionals (Coto et al., 2020).

Allied healthcare professionals are essential team members in healthcare, especially as the importance of coordinated healthcare teams increases (Seaton et al., 2021). Coordinated healthcare teams have been linked to improved health outcomes in inpatient and outpatient facilities and in chronic, acute, and primary care (Brooks et al., 2020). By working with other healthcare professionals to treat, prevent, and diagnose disorders, disabilities, and diseases, allied health practitioners will continue to influence healthcare delivery (Wan et al., 2016).

The U.S. Bureau of Labor Statistics (U.S. BLS; 2018) suggested that the allied health field would likely experience long-range labor supply challenges that mirror the shortages experienced by physicians and nurses. Among the 15 fastest-growing jobs, eight are allied health professions. This shortage could lead to revenue loss as patients seek services from other providers or facilities (AMN Healthcare, 2021). Healthcare workers continue to struggle with stressors such as heavy workloads and burnout. Fitriasari (2020) acknowledged that healthcare professionals, such as nurses, encounter job-associated burdens, such as increased workloads and unfavorable working conditions, which may add to their burnout and intention to quit. Laschinger et al. (2013) confirmed that burnout was a considerable predictor of Canadian nurses' JS. Thus, healthcare organizations must keep a healthy workforce supported by content healthcare professionals who experience a sense of purpose and are motivated to work.

Statement of the Problem

Allied healthcare professionals who are dissatisfied, disengaged, or thinking of leaving their organization are considered a potential cost and threat to their organizations. Healthcare organizations face high financial costs associated with staff turnover (Hashish, 2017).

Consequently, organizations that experience employee turnover report a decline in organizational productivity due to knowledge loss (Cho & Song, 2017). Shreffler et al. (2020) reported that employees who experienced emotional exhaustion exhibited increased potential for medical errors, reduced empathy toward patients, decreased productivity, and increased turnover rates. However, WS might help healthcare organizations prevent their workforce's disengagement, losses in JS, or turnover.

The specific problem this study identified was the relationship between WS and skilled allied healthcare professionals thinking of leaving their jobs, being dissatisfied, and not being engaged. Baldacchino (2017) proposed that the workplace should be an environment where an employee experiences a connection with personal values aligned to their work, which are aspects of WS. There is a continued high demand for allied healthcare professionals (Kepley & Streeter, 2018; U.S. BLS, 2018), but low retention rates have been reported (Bukach et al., 2017). Researchers have examined the connection between WS, EE, and JS in other industries, which has shown the potential to improve retention rates and decrease employees' frustration (Aprilia & Katiara, 2020; Mahipalan & Sheena, 2018).

Anvari et al. (2017) asserted that WS might provide insights concerning effective ways to lower TI among allied healthcare professionals. In addition, researchers have concluded that failure to incorporate WS into the workplace stifles employee performance, as it can potentially improve ethical behavior, leadership, and EE (Aprilia & Katiara, 2020; van der Walt, 2018). Therefore, there is a need to investigate further the relationship WS has with allied healthcare workers' TI, EE, and JS as an understudied part of the workforce.

Purpose of the Study

This quantitative correlational study aimed to examine the relationship between WS and three job outcomes, TI, JS, and EE, in allied healthcare workers in the United States. The independent variable was WS. The dependent variables were TI, EE, and JS. WS is expected to affect JS and EE positively but affect TI negatively. Findings from this research could assist healthcare leaders in reducing challenges faced in retaining qualified, engaged, productive, and skilled allied healthcare professionals who are critical to healthcare organizations' well-being and effectiveness.

Research Questions

RQ1: What relationship does workplace spirituality have with turnover intention among U.S. allied health professionals?

RQ2: What relationship does workplace spirituality have with job satisfaction among U.S. allied health professionals?

RQ3: What relationship does workplace spirituality have with employee engagement among U.S. allied health professionals?

Definition of Key Terms

Allied healthcare professionals. Allied healthcare professionals include "healthcare professionals, distinct from physicians and nurses, such as emergency medical technicians and pharmacists in professional or skilled healthcare" (Association of Schools Advancing Healthcare Professionals, 2020, p. 1).

Employee engagement (EE). Refers to "the harnessing of organization members' to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (Kahn, 1990, p. 694).

Job satisfaction (JS). Refers to **"**a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1304).

Turnover intention (TI). Refers to "a conscious and deliberate willfulness to leave the organization" (Tett & Meyer, 1993, p. 262).

Workplace spirituality (WS). Refers to "the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community" (Ashmos & Duchon, 2000, p. 137).

Theoretical Framework

This study focused on the relationship between WS as the independent variable and TI, JS, and EE as the dependent variables. Job embeddedness theory (JET), developed by Mitchell et al. (2001), was a key theory that guided this study. A concept or factor known as "job embeddedness" has the potential to influence someone to remain in their present role (Mitchell et al., 2001). The concept focuses on factors that keep an employee on the job rather than quitting (Holtom & Darabi, 2018). The theory also explains how employees interact with their jobs (Kiazad et al., 2015). In addition, it posits that on-the-job and off-the-job factors or variables are strong predictors of retention and, therefore, lower turnover. For example, employees who experience a sense of community are more likely to be engaged. WS can create this sense of connection by fostering a sense of purpose in the workplace (Afsar & Rehman, 2015).

Organizations that embrace WS have a higher level of employee satisfaction and engagement (Milliman et al., 2017). When employees are spiritually fulfilled, they are more likely to be engaged (Milliman et al., 2018). According to JET, employees are more likely to be satisfied with their jobs when they feel a sense of connection to their jobs (Tabak & Hendy, 2016). When an employee's values align with the organization, both the individual and the

organization benefit because they are more likely to be engaged in their work and feel a sense of belonging. Organizations that embrace WS have a higher level of employee satisfaction and engagement (Tett & Meyer, 1993). This is probably because workers can find meaning in their work.

JET can also be used to explain TI (Ghosh & Gurunathan, 2015). When employees believe they are incompatible with their job or organization, they are more likely to be dissatisfied with their employment. In addition, employees might be disengaged in their work and feel alienated in an environment where they are not motivated.

Workplace Spirituality

WS has emerged as a response to the growing disconnect that employees feel in the modern workplace. Early in the 1920s, a grassroots movement promoting WS was born from people trying to live out their religious or spiritual beliefs or values at work, although early expressions in Western countries were more related to faith. Today, many organizations realize the value of WS (Benefiel et al., 2014). WS can also help employees be spiritually connected to their work, improving productivity and a feeling of completeness (Garg, 2017).

WS enhances performance and reduces employee turnover rates (Afsar & Rehman, 2015). WS's benefits in an organization include improved job retention, a competitive edge in the job market (attracting job candidates), organizational and employee productivity improvement, and increased wages (Chawla, 2014). WS may also contribute to reduced stress, employee career costs, and increased fulfillment, creativity, and JS. Corporate benefits include increased EE, voluntary commitment, ethical behavior, and trustworthiness (Kazemipour & Mohd Amin, 2012). Consequently, Jena and Pradhan (2018) proposed that human resource (HR) executives could implement WS practices to create a culture that promotes EE, JS, and retention.

Turnover Intention

TI is a worker's intention to voluntarily leave a job or an organization, which is a predictor of actual turnover (Beehner & Blackwell, 2016). Organizational behavior and human resource management literature have extensively studied the concept of TI. Several factors have been associated with TI, including decreased JS, organizational commitment, and workplace stress.

Organizational policies and practices that effectively reduce TI include providing employees with opportunities for job enrichment and ensuring a positive work–life balance, competitive salaries, and benefits. Organizations that promote a positive and supportive work environment are more likely to retain their employees. Reducing TI and voluntary turnover by addressing their causes is essential as it leads to higher levels of staff retention. Staff turnover increases healthcare costs (Hong, 2012) because organizations must meet the training and recruitment costs of replacing staff. The new employee may take time to meet required organizational standards due to the time it takes for them to learn about the job and culture.

An increase in WS can reduce turnover due to job embeddedness and employee connection to the organization. Research by Anvari et al. (2017) highlighted the importance of WS in reducing TI among healthcare workers. The study underlined the need for hospital administration to improve WS by aligning organizational values and compassion with the doctors' values. Hwang and Yi (2022) found that the dimensions of WS, aligned values, understanding, spiritual association, and meaningful work, were negatively associated with TI.

Job Satisfaction

Locke (1976) defined JS as a positive inner feeling experienced on the job. In simple terms, JS is whether a worker likes their job or not. According to Locke (1976), JS is a critical

variable that can explain the turnover of allied healthcare professionals. Different scholars have identified various factors that influence JS among allied health professionals. JS is influenced by various elements, including working overtime, workplace violence, the complexity of the healthcare structure, understaffing, and lack of work–life balance (Iliffe & Manthorpe, 2019; Nowrouzi-Kia et al., 2019). Research by Maqbali (2015) posited that nurses' JS or discontent influenced their turnover and impaired an organization's efficiency and economic security. Andresen et al. (2016) established that nurses' satisfaction levels determined their intention to change their jobs. Although nurses are not allied healthcare workers, they can be used as a reference point for allied healthcare workers.

WS and JS can positively influence healthcare employees' experience (Lee & Yu, 2023). WS can address job dissatisfaction, which embeds employees in their jobs and encourages interactions with others, which is beneficial for employees. WS can be a pivotal resource to organizations by providing employees with meaning, connection, and positive feelings about their jobs.

Employee Engagement

According to Roof (2015), EE is characterized by a positive outlook that fosters dedication and a fulfilling work attitude distinguished by vitality, dedication, and absorption. It is influenced by several elements: (a) organizational culture, (b) leadership style, and (c) WS (Iqbal et al., 2021). EE among healthcare staff is reduced when the team strains to work with more patients under challenging conditions, and as a result, they leave the workforce.

An investigation by Roof (2015) on the relationship between WS and EE found that WS influenced workplace participation and EE through values and spiritual connection. Saks (2011) suggested that WS drives EE. A study by Roof (2015) showed that specific employee

commitment features like vigor and dedication were linked to WS. Workers who are engaged report being more capable of achieving work-related tasks and are, therefore, productive. Employees who lack engagement tend to have less or no passion for their jobs, which may lead to low achievements (Bhuvanaiah & Raya, 2014).

WS can encourage EE on a personal and organizational level if accepted by organizations (Majeed et al., 2018). Fiske's (2019) self-transcendence theory may explain the relationship between WS and EE. It suggests that people who feel connected to something larger than themselves tend to be motivated and committed to their work. Additional research is required to understand how leadership behaviors and organizational conditions affect EE (Roof, 2015).

Significance of Study

The findings from this study may provide solutions for HR managers, leaders, administrators, and financial managers in healthcare organizations that are developing and hiring employees and working on retention strategies for allied healthcare professionals. Based on the current projections of allied health employee shortages in the United States, healthcare organizations could suffer severe financial losses and further negatively impact the quality of care to patients (Snavely, 2016). This is because allied healthcare workers are an essential group of workers who assist in patient care but are frequently overlooked.

The healthcare sector is experiencing a global shortage of allied healthcare workers, which can be detrimental to organizations (Yanchus et al., 2017). Numerous studies have shown that it is costly to hire and train a skilled workforce and stabilize the current allied health workforce to improve quality care and organizational performance (Abelsen et al., 2020; Chisholm et al., 2011; Nancarrow, 2015). With continued projections of rising costs in healthcare, allied healthcare worker shortages, and turnover, there will be significant financial

implications from ignoring factors that influence workers' satisfaction, engagement, and turnover (Henderson et al., 2015).

There was a need to study WS's potential impacts on allied healthcare professions because it is less studied, especially in the United States. The findings of this study may raise leaders' awareness about the relationships between WS, TI, EE, and JS. Having employees who are involved and satisfied and who would stay longer would help to attract other highly motivated employees and ensure the positive reputation of healthcare organizations. This study may contribute to allied healthcare workers' corporate well-being discussions. The findings can be used to strategize and make changes that may improve allied healthcare professionals' engagement, satisfaction, and retention levels.

Organization of the Reminder of the Study

Chapter 1 has introduced the major concepts and aims of the study and provided background on allied healthcare professionals. In Chapter 2, a thorough review of the scholarly literature related to WS's influence on TI, EE, and JS is presented. Chapter 3 discusses the methodology, data collection procedures, data analysis, and ethical standards applied in the study. Chapter 4 provides the findings from the survey conducted, and Chapter 5 presents the study's conclusions, identifies areas for further research, and summarizes the study.

Chapter 2: Literature Review

The general problem that this study focused upon was the relationship between WS and three job-related outcomes, EE, TI, and JS, which had not been studied among U.S. allied health professionals. Many healthcare services that are not provided by physicians or nurses are offered by allied health professionals, an employment category that includes a variety of adjunctive, supportive specialists such as technologists, therapists, nutritionists, hygienists, and counselors (Coto et al., 2020; Scott et al., 2012). While WS has been studied in other countries and sectors (Bhaskar & Mishra, 2019; Indradevi, 2020), only a few research studies have focused on WS among allied health workers in general and specifically in the United States. Most previous research on WS was focused outside of the United States, in eastern and Asian countries, where Christians are a minority (Aboobaker et al., 2019; Bhaskar & Mishra, 2019; Indradevi, 2020). The United States, as a Western, majority Christian, developed, and relatively wealthy country with a unique healthcare sector (e.g., the role of technology, cost), is a unique context where this study was done.

Literature Search Methods

The existing literature for this study was found using online research databases, including the Abilene Christian University (ACU) online library, PsycINFO, ProQuest, the Education Resources Information Center (ERIC) database, and Google Scholar, as well as books by academic publishers. Most studies examined in this search were from the past 10 years, although seminal research literature from studies that took place more than 10 years ago was reviewed. Search terms were used alone and in combination to find information regarding related studies. These terms included *allied health professionals*, *allied health workers*, *spirituality*, *workplace spirituality*, *turnover intention*, *employee retention*, *job satisfaction*, *employee engagement*, and

work engagement. Notably, fewer studies focused on allied health workers (compared to nurses) and the U.S. context (compared to other countries). Those deemed applicable to this study were included in this chapter, and their references were examined to find other pertinent studies. Existing literature that focuses on the primary constructs and theories used in the current study are discussed and synthesized, as gaps have been identified on what is known about the relationships between WS, EE, TI, and JS among U.S. allied health professionals.

Spirituality

The word "spirituality" is derived from the root of the Latin word "spiritus," which means to breathe the winds of life (Villani et al., 2019). Within the United States, society often confuses spirituality and religion, treating them synonymously or considering one necessary for the other (Benefiel et al., 2014; Fry, 2009). However, in defining spirituality, researchers recognize the difference between the two, positing that spirituality is developed individually through the human spirit and not concerned with the social practices established by religious groups (Fry, 2005, 2009). Furthermore, scholars report that spirituality does not necessarily imply any relationship with specific religious practices or beliefs but is essentially based on an individual's values and philosophies of life (McKee & Chappel, 1992; Tanyi, 2002). Also, a spiritual approach to life entails concentrating on objectives and activities relating to the spirit or the soul instead of physical nature (e.g., one's body or the physical world).

Vasconcelos (2019) contended that spirituality provides individuals with a moral compass and feelings of meaning and self-worth, suggesting that individuals' spirituality results from heightened spiritual intelligence. Heightened spiritual intelligence is created from moral courage, altruism, and optimism (Tanyi, 2002; Vasconcelos, 2019). Vasconcelos (2019) concluded that spirituality should be encouraged as a part of organizational culture.

Roles and Challenges of Allied Health Professionals

Many workers in the healthcare industry fill jobs that are classified as allied health professionals or allied health workers. According to the California Hospital Association, professionals in occupations considered to be allied health workers include clinical laboratory scientists, medical laboratory technicians, radiologic technologists, CT technologists, PET technologists, cardiovascular and interventional radiology technologists, MRI technologists, ultrasound technologists, nuclear medicine technologists, pharmacy technicians, physical therapists, physical therapy assistants, and respiratory therapists (Institute of Medicine, 2011). Scott et al. (2012) added that allied health professional workers include those working in dietetics, pharmacy, and rehabilitation medicine sectors, with rehabilitation medicine professionals including physiotherapists, occupational therapists, and speech pathologists. More recently, Coto et al. (2020) studied the impacts of the COVID-19 pandemic on allied health workers, and those who participated in the study included audiologists, psychologists, mental health counselors, social workers, nutritionists, dieticians, dental hygienists, speech pathologists, physical therapists, and occupational therapists. Moyoh et al. (2022) noted that allied health professionals make up the largest population within the healthcare workforce in the United States.

Patients can be treated and cared for by physicians and nurses but can also receive medical attention and treatment from allied health professionals as part of a team that works with and supports physicians and nurses. Coordinated healthcare teams include physicians, nurses, and allied health professionals. These medical service teams have been linked to improved health outcomes in inpatient and outpatient facilities as well as chronic, acute, and primary care (Brooks et al., 2020). Seaton et al. (2021) studied allied health workers' perceptions of interprofessional

collaboration in the U.S. healthcare industry. These researchers found that allied healthcare workers would like improved communication and clinical interaction between allied health workers and health practitioners from other professions, such as physicians. Moyoh et al. (2022) reported that although allied health professionals make up a large percentage of employees in the U.S. healthcare industry, they can sometimes be relegated to supportive roles, and they are rarely asked to help provide patient education. These researchers found that an expanding role for allied health professionals was warranted. Although additional training may be required, allied health workers could significantly contribute to the healthcare system by being used more for patient education (Moyoh et al., 2022). The healthcare industry needs allied health professionals in a variety of positions. They fill various niches in healthcare and could be used even more.

This literature review included efforts to find and synthesize the research results focused on WS among allied health professionals with specific job titles, including therapists, technologists, hygienists, and others. There has been some research on JS among therapists, technologists, technicians, dental hygienists, speech pathologists, mental health workers, social workers, and other allied health workers (Baskin & Bartlett, 2021; Lee & Yu, 2023). However, there has been insufficient research that examined the role of WS within those professions.

Zaidi et al. (2019) studied how WS could influence the perceptions and attitudes of art psychotherapists and found that higher levels of certain elements of WS (vocational consciousness, transcendental consciousness, inner consciousness, community consciousness, and empathy consciousness) were related to higher perceptions and attitudes toward delinquent youth served by those art psychotherapists. Because nurses are often identified as allied health workers, an effort was made to find studies of WS among nursing professionals. Again, insufficient research has been done in this area. Iyer and Deshmukh (2018) studied the

relationship between job stressors and JS among nurses and found that WS moderated the relationship. Iqbal et al. (2021) studied job engagement among nurses in Indonesia and found that WS positively impacted the nurses' work engagement. Unfortunately, neither of these research groups touched on WS among nurses or other allied health workers in the United States. Additional research on WS and its effect on the work lives of allied health professionals with various specific job descriptions may help fill this gap in the existing literature.

COVID-19 as the Study Context

While allied health workers serve many purposes in the healthcare sector, they face numerous challenges. Allied health workers can face heavy workloads and unfavorable working conditions, leading to diminished health, stress, burnout, and intentions to quit (Fitriasari, 2020). Healthcare workers who experience emotional exhaustion have increased potential for medical errors, decreased empathy for patients, reduced productivity, and escalated turnover rates (Shreffler et al., 2020). The COVID-19 pandemic brought new challenges for healthcare workers, which was part of the context of this study that took place after the pandemic abated.

Coto et al. (2020) reported that the reduction in nonessential medical service offerings following the outbreak of COVID-19 resulted in increased unemployment rates in the healthcare industry. The same researchers noted that early identification of mental health challenges, including stress and exhaustion, could improve well-being among allied health professionals and decrease burnout and long-term psychopathology (Coto et al., 2020). With the many challenges allied health professionals face, including the COVID-19 pandemic that was ongoing at some levels, an increase in WS could result in improved mental health, increased JS, and better job performance, resulting in improved patient care.

The COVID-19 pandemic presented challenges for all healthcare professionals, including allied health workers. The World Health Organization classified COVID-19 as a global health emergency on March 11, 2020 (Olson et al., 2020). Within 2 months, the medical profession had reported over 87,000 deaths from COVID-19 in the United States alone (Coto et al., 2020). Shreffler et al. (2020) reported that allied health workers faced challenges in treating COVID-19 patients and helping reduce the spread of infection while maintaining their routines outside the workplace of caring for their families and themselves. Saragih et al. (2021) wrote that the international lockdown that followed the COVID-19 pandemic was implemented to curb disease transmission. Still, it interrupted the healthcare routines of workers in many industries, including allied health professionals. The same researchers noted that the resulting reduction in physical activity was associated with adverse outcomes in psychological health (Saragih et al., 2021). For allied health professionals, the challenges associated with the COVID-19 pandemic presented themselves in various ways that negatively impacted those workers' mental and physical health, which could have been mitigated with increased WS.

The mental health problems encountered by allied health professionals during the COVID-19 pandemic have been varied and pronounced. Since the outbreak of the COVID-19 pandemic, many allied health workers have experienced emotional exhaustion, stress, trauma, and burnout (Shreffler et al., 2020). Globally, the added challenges for healthcare professionals during the COVID-19 pandemic resulted in elevated mental health problems. The most common problem was post-traumatic stress disorder (PTSD), followed by anxiety, depression, and distress (Saragih et al., 2021).

Hall (2020) found that although the COVID-19 pandemic caused tremendous upheaval in most people's lives, it was especially difficult for healthcare professionals, who expressed

feeling overwhelmed and burned out. Hall (2020) reported that the three primary signs of professional burnout are exhaustion, cynicism, and reduced professional efficacy. The COVID-19 pandemic exacerbated those symptoms among allied health professionals and other medical industry workers reeling from work overload, lack of control, insufficient reward, lack of fairness, breakdown of community, and value conflicts. Among surveyed healthcare workers in departments of infectiology and internal medicine and workers in fever, intensive care, surgery, and psychiatry wards, the outbreak of the COVID-19 pandemic resulted in an extensive workplace strain due to stress, depression, and anxiety (Saragih et al., 2021). On the other hand, the COVID-19 pandemic forced allied health workers to adapt to new situations and acquire new knowledge. This current study aimed to provide a better understanding of the role of WS in the health industry to help lead to an increase in JS, EE, and job performance by allied health professionals and a reduction in TI, even in the face of any pandemic.

Workplace Spirituality

WS is viewed as a state of mind in which employees perceive a sense of trust-based connectedness. It allows workers to provide meaningful, goal-oriented work to their employer organization (Villani et al., 2019). WS can also be understood as employees' awareness of an inner life that grows and is nurtured by a job that is perceived to be meaningful and that occurs within a community context (Salem et al., 2023; Villani et al., 2019). Indradevi (2020) wrote that an employee's good fit with an organization results from a match between the employee's values and their perception of the employer organization's spiritual values. This can also be defined as an employee's sense of oneness with the organization. It was noted that when employees felt that their organization exhibited spiritual values, they perceived it as a place that promoted mutual trust, honesty, and openness (Indradevi, 2020).

According to Ashmos and Duchon (2000), "spirituality at work is a recognition of an inner life that nourishes and is nourished by meaningful work that takes place in the context of community" (p. 135). While many agree with Ashmos and Duchon's (2000) definition, Giacalone and Jurkiewicz (2010) claimed that WS is a "framework of organizational values evidenced in the culture that promotes employees' experiences of transcendence through the work process, facilitating their sense of being connected to others in a way that provides feelings of completeness and joy" (p. 87). Definitions of WS often emphasize that spirituality must be encouraged in the workplace for successful implementation (Ashmos & Duchon, 2000; Giacalone & Jurkiewicz, 2010).

Some authors suggest that spirituality may not belong in the workplace (Drucker, 1974; Tourish & Tourish, 2010). For example, Tourish and Tourish (2010) examined the influence of an organization's promotion of spirituality on its workforce, claiming that forced spirituality could "serve as a vehicle for the advancement of a more controlling and oppressive leadership agenda than is normally acknowledged or may be intended" (p. 209). These authors claimed that employers do not have the right to promote anything but performance metrics and job-related duties, and even the suggestion of spirituality within a workforce can abuse the power of those in leadership positions, as employees may be obliged to follow their bosses' spiritual recommendations to keep their jobs (Tourish & Tourish, 2010).

While some previous literature has indicated that WS may be detrimental within the workplace, other research has contended the opposite. Benefiel et al. (2014), Fry (2009), and Giacalone and Jurkiewicz (2010) all reported that the application of spirituality within the workplace had produced consistently positive outcomes. Such studies demonstrate that employees' organizational commitment increased with the promotion of spirituality within the

workforce. Further, employers promoting WS have increased employee performance, productivity, job satisfaction, and retention rates. Fry (2005) and Benefiel et al. (2014) argued that implementing spiritual leadership makes organizational leaders committed to their employee's well-being.

Additionally, WS can benefit organizational performance in various ways. For example, Salem et al. (2023) found that WS promoted innovative behaviors within the workforce. WS has also been shown to impact worker's attitudes regarding their jobs positively (Gatling et al., 2016; Jena & Pradhan, 2018), on EE and employees' TI within the hospitality industry (Milliman et al., 2018), and on an organization's ability to attract and retain employees (Jena & Pradhan, 2018; Milliman et al., 2018).

Previous research also indicated that WS might be beneficial from employees' perspectives. Participants in several studies have reported perceptions of WS as a positive factor (Bhaskar & Mishra, 2019; Indradevi, 2020; Rathee & Rajain, 2020) that employees can sense in the workplace and that those perceptions can lead to improved attitudes about work. For example, Schneider et al. (2015) explored perceptions of spirituality and meaning among employees at a nonprofit organization in a Midwestern U.S. city. They found that WS was positively related to JS and meaning in life. In addition, multiple researchers confirmed that WS could mitigate the negative workplace experiences of abusive supervision and workplace incivility (Salem et al., 2023; Singh, 2019).

Employees seek inspiration and meaning in their work and tend to see their jobs as not simply a source of income (Indradevi, 2020; Rathee & Rajain, 2020). Rathee and Rajain (2020) and Saragih et al. (2021) reported that WS reflected an individual's desire to find an ultimate purpose in life, to find one's identity or meaning in life through work, to build strong

connections with coworkers and others associated with work, and to realize an alignment or consistency between their personal core beliefs and their employer organization's values.

Workplace Spirituality in the Healthcare Industry

Researchers focused specifically on the healthcare sector (e.g., nursing) concluded that WS could have a positive influence on healthcare workers' feelings of satisfaction at work and connectedness with coworkers and can positively influence patient outcomes and organizational effectiveness (Celano et al., 2022 McKee & Chappel, 1992). WS was more prevalent in the healthcare industry during the COVID-19 pandemic, as nursing leaders were tasked with using tactical strategies to promote the well-being of overworked nurses. It was found that incorporating spirituality was one of the most productive and successful strategies (Celano et al., 2022). Comparatively, nursing is encouraged through organizational support of WS, which improves the retention of nursing staff. Further integration of spiritual wholeness could commence during nursing school, with healthcare organizations continuing a wellness program that focuses on whole-person care (Celano et al., 2022). To increase nursing resilience, authors noted that effective methods of promoting overall well-being, self-care, and appreciation were necessary (Celano et al., 2022).

Employee Engagement

EE is a facet of an organization often misunderstood by those in leadership positions. The impact an employee can have on organizational climate has been suggested as critical for an organization's overall success. Generally, EE is defined as a concept describing employees' dedication and enthusiasm toward their position within an organization (Sahni, 2021). This concept is not just focused on an employee's contentment or satisfaction in their position but how their satisfaction relates to their own and their company's performance and productivity

(Osborne & Hammoud, 2017). All organizations should recognize the need for positive EE for overall success in their business. For such success, organizational leaders should implement effective strategies that create a stronger and more positive work culture, reducing staff turnover, increasing productivity, building better work and customer relationships, and impacting company profits.

Osborne and Hammoud (2017) contributed to Kahn's (1990) framework when they reported that EE could be explained as a positive and fulfilling work-related state of mind characterized by vigor, dedication, and absorption. These researchers noted that vigor relates to high levels of energy and mental resilience on the job and the willingness to invest effort in one's work. Dedication refers to employees' involvement in their work and feeling high significance levels, enthusiasm, inspiration, and pride. Finally, absorption involves being fully concentrated and happily engrossed in their work so that time passes quickly and employees have difficulty detaching themselves from their jobs.

In his seminal work on EE, Kahn (1990) wrote that employees could fully engage with their work when they perceive a high degree of meaningfulness, safety, and understanding of their responsibilities on the job. Kahn (1990) stated that EE was a construct based on the degree to which employees commit their full physical, cognitive, and emotional selves to the performance of their jobs. I found that levels of EE are raised when employees engage with others and express their true personal selves. Conversely, the levels of EE were reduced when employees disengaged or withdrew from others and were defensive about their true personal selves. Kahn and Fellows (2013) suggested that EE refers to how employees find meaning in their work.

Kahn and Fellows (2013) reported that EE could be described as situations in which employees are attentive, connected, integrated, and absorbed in their work. They added that the foundations of EE lie within sources of meaning that were inclusive to attractive identities, challenging work, clear job roles, and meaningful rewards. Kahn and Fellows (2013) noted that relational sources of meaning included heard voices, important work relationships, and competent supervision. EE is not simply a matter of employees putting forth vigorous effort but refers to employees acting as their true, full selves in the performance of their jobs (Kahn & Fellows, 2013). In a study of EE among workers in the United States, Shuck and Reio (2013) found that organizational climate was directly related to personal accomplishment, depersonalization, emotional exhaustion, and psychological well-being and that EE had a moderating effect on those relationships. Highly engaged employees had higher levels of well-being and accomplishment, and less engaged employees had higher levels of exhaustion and depersonalization (Shuck & Reio, 2013). Workers feel a sense of EE when their work has meaning and can openly display their true personalities and use their experiences, knowledge, and values.

Researchers have supported the idea that improvements in EE can lead to increased job performance and worker contentment (Kahn, 1990). Osborne and Hammoud (2017) studied EE among employees at communications companies in Mississippi. They determined that EE could be increased based on management and organizational actions, including rewards and recognition, empowering employees, and establishing a bond between employees and leaders. They added that improvements in EE could be directly related to improvements in organizational profitability (Osborne & Hammoud, 2017). Motyka (2018) wrote that worldwide, many businesses today are experiencing labor force problems due to low levels of EE, resulting in a

decline in job performance. The relationship between EE and job performance is a relatively recent topic for research, with most studies conducted since 2013 (Motyka, 2018).

Workplace Spirituality and Employee Engagement

Researchers have written about a distinct and significant relationship between WS and EE (Adnan et al., 2020; Iqbal et al., 2021). Adnan et al. (2020) explored the relationship between WS and EE among allied health workers. They concluded that three dimensions of WS—transcendence, community, and spiritual values—had a positive impact on EE through four psychological conditions identified as meaningfulness in work, meaningfulness at work, safety, and availability (the latter is recognized as the commitment an employee offers to the organization in terms of being accessible and able to work). In addition, Adnan et al. (2020) examined the factors that helped employees sustain high job performance and EE levels. Iqbal et al. (2021) and Adnan et al. (2020) further reported a positive and significant relationship between WS, EE, and employees thriving on the job. Milliman et al. (2018) studied WS among employees at a U.S. hospitality organization. They found that among the study's participants, WS had a positive effect on EE and a negative effect on TI. More recent studies have been conducted by researchers who confirmed that WS has a direct positive impact on EE (Adnan et al., 2020; Iqbal et al., 2021). Also, it was found that EE positively impacts job performance (Jena, 2022). However, Jena (2022) noted limited research on the association between WS and EE. Additional research on this topic could provide a deeper understanding of WS and how it affects EE.

Workplace Spirituality and Employee Engagement in the Healthcare Industry

Some researchers have explored the relationship between WS and EE among workers in the healthcare industry, but very few were set in the United States. For example, authors of

several studies have concluded that WS can positively influence EE (Almotawa & Shaari, 2019; Cruz et al., 2022). Almotawa and Shaari (2019) also found that JS mediated between WS and EE. Cruz et al. (2022) studied the effects of WS on nurses in Saudi Arabia and found that hospitals that provided employees with a strong sense of WS impacted the work engagement of nurses significantly, with varying levels of vigor and absorption reported by different hospitals according to those hospitals' levels of WS.

Workplace Spirituality and Employee Engagement in Other Professions

Previous studies have focused on the impact of EE on workers in other professions. WS and EE have been found to positively influence each other (Gupta & Mikkilineni, 2018; Jia-Jun & Hua-Ming, 2022) among employees at governmental and nongovernmental organizations (e.g., banking, higher education), including positive correlations between components of WS (including inner life, meaningful work, and community involvement) and elements of EE that include attention and absorption. This indicates that employers should provide workers with meaningful work to enhance their engagement on the job.

Turnover Intention

Another central theme within this study was TI. TI refers to an organization member's intention to quit their job and look for another because of dissatisfaction (Namin et al., 2022). In today's marketplace, businesses experience multiple factors that negatively impact success and profitability, including loss of business, customer relationship difficulties, delays in contract fulfillment, and employee exits (Indradevi, 2020). In addition, Holtom et al. (2006) noted that attracting and retaining valued employees are organizations' most critical issues. Therefore, TI can be seen as a legitimate management concern in various business sectors, including among the employers of allied health professionals. Previous research has reported that TI had negative

consequences for workers (Lu et al., 2002; Namin et al., 2022) and employer organizations (Indradevi, 2020), while others have pointed out that TI could be reduced with WS (Aboobaker et al., 2019) or with JS (Lu et al., 2002).

The high turnover rates of nurses related to JS in the healthcare sector have led to dangerous consequences. For example, Beecroft et al. (2008) noted that nurse turnover is a patient safety issue. The researchers determined that among newly graduated nurses working at a hospital in Southern California, nurse turnover and TI could be negatively influenced by JS. Similarly, Applebaum et al. (2010) studied work environments among nurses at a hospital in New Jersey. They determined that there was a significant relationship between JS and TI. However, these researchers found that other work factors such as odor, noise, light, and color also had little impact on JS or TI among participants.

Factors That Contribute to or Influence Turnover Intention

Reduced JS is one of the most influential contributors to TI. Low JS has been shown to undermine employee commitment and increase employees' intentions to leave (Lu et al., 2002; Quek et al., 2021; Smith, 2018). According to Lu et al. (2002) and Smith (2018), TI and JS can negatively affect each other. For example, Lu et al. (2002) studied workers in healthcare settings and found they experienced high stress levels, burnout, and thoughts of quitting. Similarly, Smith (2018) examined JS and TI among a national sample of American workers from various industries and found that overall, JS and TI have a negative relationship. Therefore, JS was inversely associated with TI. Fitriasari (2020) added that JS reduces burnout, intent to quit, and mental health symptoms. However, organizational compassion and aligning employees' and organizational values are two factors that improve employee retention, reduce TI, and increase JS.

Organizational leadership and employees' experience are also associated with TI (Pradhan et al., 2019; Smith, 2018; Wan & Duffy, 2022). For example, Pradhan et al. (2019) found that abusive supervision was directly correlated with elevated levels of TI. Further, participants with higher TI reported being provided inadequate workplace information and disrespectfully treated. Similarly, Namin et al. (2022) found a positive relationship between workplace incivility and TI. Namin et al. (2022) added that workplace incivility could refer to rude or disrespectful behavior between peers, employees, and supervisors. Finally, Wan and Duffy (2022) noted that public and private hospital healthcare workers had poor perceptions of organizational justice, contributing to high TI levels (Wan & Duffy, 2022).

Aboobaker et al. (2019) focused on other elements of workplace experience that affect TI, including spirituality. WS was reported to positively impact employees' sense of well-being and intention to stay at an organization (Aboobaker et al., 2019). These findings led to an examination of the relationship between WS and TI. Previous researchers note a significant relationship between WS and TI, concluding that WS can reduce TI among employees (Bhaskar & Mishra, 2019; Jena & Pradhan, 2018; Siswanto & Falabiba, 2020). When organizations facilitate experiences of WS, employees feel more energized by their work environment, and the employing organizations experience a reduction in TI among employees.

Workplace Spirituality and Turnover Intention in the Healthcare Industry

Some research has been done on the relationship between WS and TI among healthcare professionals. Previous studies have shown that WS reduces TI among workers in the healthcare sector (Fitriasari, 2020). Fitriasari (2020) suggested that some hospitals adopt an organizational approach to increasing WS and have mission statements that include the values of spirituality in the workplace. Fitriasari (2020) did not specifically refer to WS and its influence on TI but

reported that social support in many forms could inversely impact allied health professionals' feelings of burnout and intentions to leave their jobs.

Workplace Spirituality and Turnover Intention in Other Professions

Outside the healthcare sector, researchers have confirmed that WS negatively impacts TI in various industries (Siswanto & Falabiba, 2020; Yansens et al., 2020). For example, Siswanto and Falabiba (2020) studied the relationships between TI and employee performance among employees of an agricultural center in East Java. These researchers determined that WS positively influenced employee performance and had a pronounced negative influence on TI.

Other researchers found little connection between WS and TI. For example, Beehner and Blackwell (2016) studied burnout and TI among employees of a multi-location quick-service restaurant in Florida. They found that when a WS program was implemented, it had little to no impact on TI. The researchers asserted that their findings suggest that interventions to increase WS may not successfully mediate TI within the food service industry. The results of these studies support the idea that additional research on the relationship between WS and TI can result in improvements in JS and the work environment for employees in multiple industries.

Job Satisfaction and Allied Health Professionals

JS can be considered the sum of an employee's feelings, thoughts, and experiences in the working environment, whether positive or negative (Vorina et al., 2017). Individuals with positive thoughts, feelings, and experiences will likely have increased JS compared to those without. There have been multiple studies in which the authors examined the role of JS and its impact on workers. As stated, JS has been linked to TI, EE, and WS (Romig et al., 2011; Vorina et al., 2017). According to Romig et al. (2011) and Vorina et al. (2017), satisfied and engaged

employees are less likely to seek alternative employment. As a result, they may create organizational advantages related to EE and increased productivity.

Research has been conducted on factors that impact JS among allied health professionals (Applebaum et al., 2010; Moore et al., 2021; Romig et al., 2011). Previous research findings indicated that JS was positively influenced by feelings of workplace support, connectedness, and a sense of being appreciated by superiors (Applebaum et al., 2010; Rosenberg & Bonsaksen, 2022). In addition, effective leadership, possibilities for advancement, employee recognition, and managerial support have also been linked to higher levels of JS among allied health professionals (Wilson, 2015). Rosenberg and Bonsaksen (2022) studied JS among physical therapists working in general hospitals in Norway and found that levels of JS among these allied health professionals were related to feelings of empowerment. Specifically, an improved sense of empowerment led to increased JS and work performance.

In addition to being influenced by work-related factors, JS may be related to employees' personalities. For example, Moore et al. (2021) studied the relationship between personality characteristics and JS among registered dietitian nutritionists in North Carolina. They found that agreeableness and neuroticism impacted overall JS among allied health workers. Additionally, Wilson (2015) found that JS was related to feelings of self-efficacy and autonomy.

Workplace Spirituality and Job Satisfaction

Other researchers have examined the relationship between WS and JS and concluded that WS has a clear and specific positive impact on JS (Garg et al., 2019; Indradevi, 2020; Rathee & Rajain, 2020). For example, Schneider et al. (2015) studied spirituality among workers at a nonprofit organization in a Midwestern U.S. state. They determined that WS could positively impact JS and employees' sense of meaning in life and meaning at work.

Prior studies have examined the relationship between WS and JS in industries outside the healthcare sector. Researchers found that high levels of WS resulted in increased levels of JS. For example, Gatling et al. (2016) determined that among managers at a hospitality organization in the United States, WS increased the commitment and retention of supervisors, who positively influenced JS and the quality of customer service. Within education, Amram (2022) found that WS positively impacted lecturers' performance, and the researchers added that intelligent spirituality and leadership spirituality significantly impacted JS.

In addition to directly improving JS, previous studies have linked WS to various indirect causes of JS. For example, Indradevi (2020) noted that WS supported employee contentment, improved job achievement, heightened employee morale, and increased JS. In addition, Rathee and Rajain (2020) reported that WS could lead to increased productivity and profitability for the organization and was associated with increased employee perceptions of JS and improved job performance. Finally, Zaidi et al. (2019) determined that WS was directly linked with organizational performance and significantly impacted JS.

Workplace Spirituality and Job Satisfaction in the Healthcare Industry

Other studies have explored elements of WS, TI, JS, and EE among healthcare professionals outside the United States but not among allied health professionals in the United States. Researchers have confirmed that among workers in the healthcare sector countries outside the United States, WS can have a negative impact on TI (Fitriasari, 2020), a positive impact on JS (Iyer & Deshmukh, 2018; Sony & Mekoth, 2019), and a positive effect on EE (Iyer & Deshmukh, 2018). Iyer and Deshmukh (2018) studied WS among nurses and found that WS can have a positive impact on JS. However, the researchers recommended additional studies on the relationships between WS and leadership styles, organizational policies, and organizational

culture. However, these researchers did not touch on the effects of WS among allied health professionals in the United States. Lee and Yu (2023) studied WS and JS among pharmaceutical employees in South Korea. They found that WS was directly related to JS, but the researchers recommended additional research on how abusive supervision can negatively affect WS. Overall, there was a need to explore WS among allied health professionals in the United States.

Previous studies have confirmed a relationship between WS and JS among allied health professionals. JS among workers in the healthcare industry can be improved through spiritual orientation, meaning in one's work, compassion within the organization, and an alignment of personal and organizational values (Zaidi et al., 2019). All these researchers reached conclusions that supported the notion that elements of WS positively affect some aspects of JS.

Job Satisfaction, Workplace Spirituality, Turnover Intentions

There is some evidence that JS impacts the relationship between WS and TI. That is, while research has shown that dimensions of WS have a significant and negative relationship with TI (Anvari et al., 2017; Hwang & Yi, 2022), past researchers have also noted that JS influences the relationship between WS and TI (Bhaskar & Mishra, 2019; Komala & Ganesh, 2007). Bhaskar and Mishra (2019), for instance, noted the importance of focusing on satisfaction through the dimensions of WS as a way to reduce TI. In their study, the researchers examined this topic by utilizing a survey research design, employing 314 participants (Bhaskar & Mishra, 2019). These scholars further found that organizational support had a significant impact on increasing JS, which consequently moderated the relationship between WS and TI (Bhaskar & Mishra, 2019). Komala and Ganesh (2007) explained this phenomenon in their study, as they initially highlighted the positive relationship between WS and JS among nurses and doctors. Among healthcare worker participants, the researchers found that JS could be a means to

decrease employee burnout (Komala & Ganesh, 2007). As such, JS impacts the extent to which WS drives TI among nurses and doctors (Komala & Ganesh, 2007). This body of literature provided initial empirical knowledge regarding the associations between JS, WS, and TI (Bhaskar & Mishra, 2019; Komala & Ganesh, 2007). Specifically, JS could be used as a means in the workplace to mitigate the influence of WS on TI.

Other researchers have found some connections among the variables of JS, WS, and TI. Wu et al. (2020) and Zhang et al. (2019) were among the researchers who noted the importance of WS in increasing JS and, thus, decreasing TI. Wu et al. (2020), for instance, administered self-reported questionnaires among clinical nurses in two hospitals. Their quantitative results indicated that WS significantly impacted JS, which, in turn, indirectly decreased TI among clinical nurses (Wu et al., 2020). In a more recent study, Zhang et al. (2019) concurred with these findings and noted the importance of improving WS as an organizational means to increase JS and decrease TI of accountants. The researchers examined this topic among clinical nurses using a quantitative research approach. Additionally, the findings of their study showed that JS and WS are significant predictors of the TI of nurses (Zhang et al., 2019). This pool of findings adds more empirical information regarding the relationships among the variables of WS, JS, and TI. While JS influences the relationship between WS and TI, it is also important to note and acknowledge how WS can be primarily used to increase JS and, thus, decrease TI in different organizational settings (Zhang et al., 2019).

A review of these and other studies revealed the gap in the literature that the current study addressed. Although several previous researchers have conducted studies that were focused on WS and its impacts on TI (Bhaskar & Mishra, 2019; Jena & Pradhan, 2018), on JS (Garg et al., 2019; Indradevi, 2020; Zaidi et al., 2019), and EE (Milliman et al., 2018), there has been

insufficient research on how those relationships impacted allied health professionals in the United States in a unified way (Bhaskar & Mishra, 2019; Wu et al., 2020; Zhang et al., 2019). This unknown can affect the jobs of multitudes of Americans in the allied health industry. The current study provided new information that helped fill this gap in the existing literature.

Demographic Factors and JS, TI, WS, and EE

Research has shown that demographic factors play a role in driving an individual's JS, TI, WS, and EE. These demographic factors include but are not limited to age, gender, ethnicity, and years of work experience (Bhaskar & Mishra, 2019). This section of the review provides more information about these demographic variables and their relationships with JS, TI, WS, and EE as found in extant literature.

Age and JS, TI, WS, and EE

The demographic variable of age has been linked to JS, TI, WS, and EE outcomes. For one, age disparities related to JS exist. Carvajal et al. (2019) found that JS significantly varies by age among U.S. pharmacists. That is, younger pharmacists reported less JS than their older counterparts (Carvajal et al., 2019). In addition to JS, Oh and Kim (2019) found that age was significantly linked to TI among employed doctors. Past results showed that there was a significant difference by age group in terms of TI (Oh & Kim, 2019). TI was found to be highest among workers aged less than 50 years old; TI was conversely lowest among those aged 50 to 59 years old (Oh & Kim, 2019). Research has also shown the link between age and WS (Sony & Mekoth, 2019). Lastly, Veth et al. (2019) reported that EE is significantly moderated by age. In an earlier study by Schaufeli et al. (2006a), significant and positive associations were found between age and work engagement.

Gender and JS, TI, WS, and EE

Gender is another demographic factor that has been linked to JS, TI, WS, and EE outcomes. In the context of the pharmacist profession, research has shown that female pharmacists had overall higher levels of satisfaction with their jobs than their male counterparts (Carvajal et al., 2019). Consistently, Oh and Kim (2019) found that gender was significantly related to TI. That is, male doctors had higher TI levels than females (Oh & Kim, 2019). In addition to JS and TI, Bharadwaj and Jamal (2020) and Zou et al. (2020) reported the interaction between WS and gender. Lastly, Khodakarami and Dirani (2020) found that levels of EE vary in terms of gender. The researchers found this in their nationally representative survey among 2,408 adults in the United States, wherein results showed that women were more likely to be engaged than men (Khodakarami & Dirani, 2020).

Ethnicity and JS, TI, WS, and EE

Another demographic variable to consider is ethnicity. Several researchers have reported the link between ethnicity and JS, TI, WS, and EE outcomes (Garcia et al., 2020). In a cross-sectional national study by Garcia et al. (2020), the results showed that ethnicity is linked to the level of JS among physicians in the United States. Findings indicated that non-Hispanic Black physicians were more likely to report satisfaction with work–life integration compared with non-Hispanic White physicians. In another study, Landes and Weng (2020) found that TI varies by ethnicity, specifically among home health aides. For example, non-Hispanic Black home health aides had higher TI when compared to non-Hispanic White home health aides. Further, non-Hispanic Black home health aides were likely to abandon their jobs due to low pay and reduced advancement options. Hispanic home health aides were more likely to change careers due to a

perceived lack of respect. Finally, Luu et al. (2019) also reported that ethnicity is linked to EE outcomes, underscoring the need for diversity-oriented human resource practices.

Years of Work Experience and JS, TI, WS, and EE

An individual's years of work experience have also been linked to the outcomes of JS, TI, WS, and EE. For one, Baek et al. (2019) found that the factor of years of work experience was significantly linked to JS among nurses with less than 20 years of work experience but not for nurses with more than 20 years of work experience. In another study, Oh and Kim (2019) reported that years of work experience were significantly linked to TI among employed doctors. In this research, Oh and Kim (2019) found that TI was highest among employees with less than or equal to 5 years of work experience. McCarthy et al. (2020) noted a significant relationship between EE and years of work experience. That is, workers in the U.S. federal government workforce with fewer years of work experience were more likely to report lower EE levels (McCarthy et al., 2020).

Urban–Rural Status and JS, TI, WS, and EE

Another demographic variable that has been linked to JS, TI, WS, and EE is the factor of urban–rural status. Past researchers, including Yasin et al. (2020) and Sellers et al. (2019), argued the need to place more attention on contrasting rural and urban contexts. This is because the rural–urban factor has been linked to JS among nurses (Sellers et al., 2019; Yasin et al., 2020). Sellers et al. (2019) concurred, noting that examining the rural–urban factor was crucial to retaining more nurses. That is, Sellers et al. (2019) found that the urban–rural status was significantly linked to JS and, thus, TI among nurses. Given this, better rural or urban fit needs to be considered when examining ways to enhance employee outcomes such as JS and TI.

As for the variable of EE, some studies have shown that urban–rural location is not significantly linked to the EE factor (Walczak, 2020; Wilson, 2009). For instance, Wilson (2009) conducted a survey on EE through an exploratory study. The researcher employed 308 employees of a statewide rehabilitation agency in the United States, and the results showed no significant differences in EE for employees working in rural versus urban office environments (Wilson, 2009). However, other research studies have indicated that urban–rural location is linked to the EE factor. In a recent study, Walczak (2020) posited that rural employees engage in their work differently as compared to urban employees. According to the researcher, self-reported evaluations have shown that urban employees perceive work outside the city as less satisfying (Walczak, 2020). This phenomenon may be attributed to having fewer work opportunities in rural settings as compared to urban settings (Soosai-Nathan & Fave, 2016; Walczak, 2020). Within this present study, four types of areas were defined: urban (in a large central metropolitan city area), suburban (on the fringe of a large metropolitan city area), micropolitan (small to medium metropolitan city), and rural (in a nonmetropolitan area; Wieder et al., 2019). This body of knowledge provided empirical information and various perspectives relating to the factor of urban–rural status and its links to employee outcomes such as JS, TI, WS, and EE.

Theoretical Framework Discussion

JET and social exchange theory (SET) underpinned this research. Mitchell et al. (2001) and Holtom et al. (2006) established the JET. Job embeddedness can be conceptualized as a force or combination of factors that make a person not leave their job (Sudibjo et al., 2020).

Mitchell et al. (2001) established that the JET helps explain workers' feelings of job embeddedness through factors at work through which their values and connections are

encouraged and cultivated. Those factors include feelings of social connectedness to coworkers, perceptions of connectedness to workplace groups, feelings of being a good fit for the job and organization, and realizing what would be sacrificed if leaving a job. The same researchers added to the original construct more recently. For example, Holtom et al. (2006) also reported that there could be an array of influences on an employee's decision to stay on the job, collectively referred to as relatedness. These researchers found that the influencing factors included relationships with coworkers, a good matchup of skills versus job requirements, employer-sponsored community service activities, and off-the-job factors such as personal, family, and community commitments (Holtom et al., 2006). Additionally, Holtom et al. (2006) added three critical aspects of job embeddedness: fit, links, and sacrifice.

Fit refers to an employee's perception of comfort and compatibility in the organization. Links refer to an employee's connections with coworkers, institutions, people outside work, and the physical community in which they live. Sacrifice refers to the employee's perception of material or psychological costs associated with leaving the job or what the employee would give up upon leaving (Holtom et al., 2006). Finally, the same researchers added that job embeddedness was directly related to organizational outcomes, including employee attendance, retention, and job performance (Holtom et al., 2006).

Ongoing studies have provided additional findings that build upon the basic premises of JET. For example, studies have confirmed that job embeddedness counters thoughts of leaving, or TI (Holtom & Darabi, 2018), and other employees' ostracism while supporting positive employee behavior (Jena, 2022). Additionally, Holtom et al. (2006) and Holtom and Darabi (2018) demonstrated that job embeddedness was connected to higher rates of JS and EE. Furthermore, employees who are more embedded in their jobs display higher performance levels

and are less likely to miss workdays or engage in counterproductive behavior (Holtom & Darabi, 2018).

In addition to EE, TI, and JS variables, JET has also been examined in relation to its connection to WS. For example, Huang et al. (2021) examined the role of WS in the socialization of new employees within an organization. Huang et al. (2021) found that WS moderated the relationship between workplace socialization efforts and job embeddedness. Further, WS significantly moderated the relationship between employee commitment and job embeddedness. The current study built upon JET as I explored job embeddedness as a theory related to WS, TI, JS, and EE.

Social Exchange Theory

The other theory that helped form the current study's primary theoretical framework was SET. SET is a psychological theory positing that social relationships are based on perceptions of trust that any gesture of goodwill will be reciprocated (Blau, 1964). For example, when used to examine workplace relationships, SET asserts that employees who receive favorable treatment from their employer will respond positively to their jobs (Blau, 1964). Similarly, if an employee's behavior is met with disapproval, it is less likely to be repeated (Ahmad & Omar, 2014).

Ahmad and Omar (2014) used the SET in a study regarding WS and deviant workplace behavior. They found that WS was positively correlated with JS and negatively correlated with deviant workplace behavior. Roch et al. (2019) also wrote that SET explains why the just treatment of employees by their employer organizations can lead to positive employee behaviors, including improved organizational citizenship behavior and job performance. Further, Harden et al. (2018) and Yin (2015) found that the SET was an appropriate framework for exploring TI and

EE. Their study's findings indicated that employees who perceived they were treated fairly were more likely to remain in their current roles and be more engaged. In addition, other researchers have contended that employees' on-the-job happiness is positively influenced by feelings of meaningfulness based on workplace connections and fairness (Rathee & Rajain, 2020; Roch et al., 2019). SET suggests that in response to an organization providing opportunities to experience WS or encouraging the experience of WS, employees will reciprocate by staying with the organization and remaining fully engaged in their work.

This current study applied SET and JET by exploring the relationships between WS, TI, JS, and EE. The use of these theories has been established in studies that were focused on WS (Bhaskar & Mishra, 2019; Indradevi, 2020), TI (Aboobaker et al., 2019), JS (Roch et al., 2019), and EE (Chaudhary, 2019).

Chapter Summary

Allied health professionals in the United States play various supporting, specialized, and adjunctive roles in healthcare and face various workplace challenges. Previous researchers have concluded that WS can be a primary factor in reducing TI and increasing JS and EE (Bhaskar & Mishra, 2019; Milliman et al., 2018; Rathee & Rajain, 2020). Many previous studies were conducted by researchers who examined one of these factors or a combination of them (Indradevi, 2020; Sony & Mekoth, 2019), but little research specifically addressed issues of WS and its relationship with TI, JS, and EE among allied health workers in the United States.

WS can potentially improve the work lives of allied health workers. This study aimed to understand better how WS impacts the jobs and lives of allied health professionals in the United States and whether WS has a relationship with TI, JS, and EE for this group. Chapter 3 addresses the methodology used in the current study.

Chapter 3: Research Method

Chapter 3 outlines the methodology used for this study. First, I will detail the research design and method used and why this approach was appropriate for this study. Then, the population and sample are discussed, including sampling and recruitment methods. Subsequently, information on the survey instruments for data collection is provided. A discussion of the data collection and analysis procedures follows. Finally, assumptions and delimitations are presented.

Purpose

The purpose of this proposed quantitative correlational study was to examine the relationship between WS and three job outcomes, TI, JS, and EE, in allied healthcare workers in the United States. The independent variable is WS, and the dependent variables are TI, JS, and EE. It was expected that WS would correlate positively with JS and EE but negatively with TI, as this has been the trend in previous research findings focused on other populations (Bhaskar & Mishra, 2019; Indradevi, 2020; Iqbal et al., 2021).

Research Questions

The following research questions guided this study:

RQ1: What relationship does workplace spirituality have with turnover intention among U.S. allied health professionals?

RQ2: What relationship does workplace spirituality have with job satisfaction among U.S. allied health professionals?

RQ3: What relationship does workplace spirituality have with employee engagement among U.S. allied health professionals?

Research Design and Method

This study was quantitative. Quantitative researchers collect numerical data from measurable sources to generalize the results to the overall population of interest (Babbie, 2010). According to Stockemer (2019), quantitative methods are appropriate when the objective is to determine relationships between measurable or quantifiable variables. Therefore, quantitative methods suited this study as I wished to focus on determining the relationships between multiple variables, namely WS, JS, EE, and TI. Lastly, the research questions associated with this study were answered by statistical analysis of numerical data collected from prevalidated scales, aligning with quantitative methods (Stockemer, 2019).

Unlike the quantitative methodology, qualitative methods are used when the researcher wishes to understand why or how a phenomenon occurs from participants' lived experiences and perspectives (Yin, 2015). Further, qualitative research is subjective, as its results are inductively created from the reality of participants (Stockemer, 2019). This subjectivity limits the generalizability of results and the ability to make broader assertions or generate objective results (Stockemer, 2019). Therefore, a qualitative methodology was not appropriate for this study as it did not aim to discover new concepts or theories but sought to find evidence to support likely relationships between the variables in a novel population.

Consistent with quantitative methodology, a correlational design guided this study. The correlational approach is unique to quantitative methods as it is used to understand the relationship between variables and illustrate association (Johnson, 2001). It should be noted that correlational designs cannot establish causation. However, Johnson (2001) argued that correlational research is ideal for establishing one variable's predictive power over another. Therefore, a correlational design was appropriate for this study as I hoped to understand the

relationship between WS, EE, TI, and JS. Specifically, this inquiry sought to understand the predictive ability of WS on EE, TI, and JS.

Within the context of this proposed quantitative correlational research, I approached this research through the lens of the postpositivist paradigm, which provided a framework in which to examine the relationships between the study variables. According to Kelly et al. (2018), the postpositivist paradigm encourages quantitative inquiry to determine or more accurately describe a phenomenon, asserting that evidence can be accumulated that supports hypotheses or inferences about the relationship between variables.

Data was collected through an online survey. According to Loomis and Paterson (2018), online surveys are beneficial in research, as they can collect data cost-effectively, quickly, and from large numbers of people in diverse areas or groups. However, surveys can be limited in that they depend on participants' understanding of the items, and the challenge is that neither the researcher nor participants can communicate to discuss their understanding of items or responses. Additionally, it has been found that people respond similarly to questions, even of a sensitive nature, in electronic and in-person surveys. Participants may also be more comfortable taking online surveys at their convenience (Loomis & Paterson, 2018). For those reasons, an online survey was used.

Population and Sample

The population of interest, or group that I hoped to learn about, was allied healthcare workers in the United States. Allied healthcare workers include skilled healthcare professionals who are not physicians or nursing staff (Association of Schools Advancing Healthcare Professionals, 2020). According to the Association of Schools Advancing Healthcare Professionals (2020), there were approximately 4.5 million allied healthcare workers in the

United States. Additionally, it was estimated that by 2036, there will be a need for an additional 11% of allied healthcare workers, and some allied healthcare fields could experience as much as a 50% surge in requirements for workers, increasing the competition for skilled allied healthcare workers.

A representative nonprobability (nonrandom) sample was selected from this population of allied health workers. A G*Power calculation was performed to determine whether the sample size was adequate to produce statistically significant results (see Appendix A). The sample size was determined using a significance level of $p < .05$ (two-tailed), a statistical power of 80%, and a medium effect size (.30), which is common (Lakens, 2022). Using these metrics, I determined that a sample size of 84 was needed to create statistically significant results. However, to account for possible incomplete or unusable data (e.g., incomplete responses), maximize the potential to determine small effect sixes (< .30), and maximize generalizability, at least 120 people were recruited.

The study participants were purposively recruited from the United States allied healthcare workers in Facebook and LinkedIn groups for allied healthcare workers. Additionally, I contacted professional network contacts on LinkedIn to recruit participants in the study. With purposive sampling, researchers relied on groups that met specific criteria, such as those working in the allied healthcare profession (Creswell & Clark, 2017), but the sample was not chosen randomly as a complete sampling frame (list of members in the sample) was not available. I contacted the Facebook group moderator and LinkedIn professional groups to seek permission to share the invitation to the study with this group (see Appendix B). Participation was voluntary and anonymous (see Appendix C).

An incentive was provided to participants who fully completed the survey to encourage participation. Once the survey was completed, participants were provided with a link to a second survey where they could enter their email addresses to ensure their responses to the main survey remained anonymous. Participants were then included in a drawing for one of two electronic $100 Amazon gift cards. I then used random.org to choose the participants at random once all data were collected. Participation in the draw was also voluntary.

Instrumentation

The data collection for this study involved an online survey presented through Qualtrics's online survey service. This survey comprised five sections (after consent had been confirmed): (a) demographic items and qualifying questions, (b) employee engagement scale, (c) job satisfaction scale, (d) turnover intention scale, and (e) workplace spirituality scale. Participants' data were only included if all nondemographic items were answered to maintain the integrity of the data. If participants exited before completing the survey and did not confirm their consent to the final question, their data were not used in the analysis. The survey took about 10 minutes to complete. The full survey is presented in Appendix D. Permission was obtained from the scale authors to use the scales.

Demographic Items

The primary purpose of the demographic items was to contextualize the sample. Therefore, the demographic section of the survey was brief. The demographic items for the proposed study included (a) age as a nominal variable, (b) gender as a nominal variable, (c) ethnicity as a nominal variable, (d) years of experience, (e) urban–rural status, (f) location of the facility, (g) income status of patients in the facility, (h) number of professionals in the facility, and (i) professional tenure in their current role (in years), as a nominal variable. Additionally, a

question asked the sample about their spirituality. As demographic items were not required for the inferential analyses, responding to them was not required because a *prefer not to say* option was provided. Additionally, two qualifying questions were asked, including (a) if they were an allied health worker and (b) the field the participant worked in. Both were nominal variables and had to be answered.

Workplace Spirituality Measure

The independent or predictor variable WS was measured using selected items from five separate scales, as compiled by Milliman et al. (2018). WS was measured by 12 items from Ashmos and Duchon's (2000) Meaningful Work and Organization's Value scales and Milliman et al.'s (2003) Sense of Community scale. All the mentioned scales use 7-point scales, from 1 (*strongly disagree*) to 7 (*strongly agree*). Though technically ordinal data, the responses were treated as interval data per analytical tradition (Harpe, 2015), as applies to all similar scales in this study. The Spirituality at Work scale developed by Ashmos and Duchon (2000) is divided into three subscales: meaningful work, sense of community, and alignment with organizational values. For example, one question from the meaningful work subscale includes, "My spirit is energized by my work" (Ashmos & Duchon, 2000, p. 145). Each subscale's score is computed by averaging responses to the items. This WS measure demonstrates good reliability with a Cronbach's alpha value ranging from .69 to .90, indicating acceptable to strong reliability.

Similarly, Milliman et al. (2003) created seven items from the work of Ashmos and Duchon (2000) to inform their sense of community scale. According to Milliman et al. (2003), after testing the subscales from Ashmos and Duchon (2000) with Pearson's correlations (convergent validity) and descriptive statistics (normality of the data), the sense of community scale demonstrated high reliability with coefficient alphas ranging from 0.82 to 0.94. Regarding

validity, Ashmos and Duchon (2000) confirmed face validity through an expert panel review of the instrument. Criterion validity was further established by Milliman et al. (2003), who conducted a confirmatory factor analysis that suggested the factor structure for the spirituality at work scale was a good fit for the data. Milliman et al. (2003) noted that this also supported construct validity as their sample was drawn from a wide range of industries rather than just the healthcare sector, as in Ashmos and Duchon's (2000) original study.

Turnover Intention Measure

The Michigan Organizational Assessment Questionnaire's TI subscale was employed to measure TI. Cammann et al. (1979) developed this subscale as part of the General Attitudes module of the full Michigan Organizational Assessment Questionnaire. The TI subscale measures this individual variable using four items on a 7-point Likert scale with responses ranging from 1, *strongly disagree,* to 7, *strongly agree*. One example question is, "I often think about quitting" (Cammann et al., 1979, p. 124). The total value for TI is calculated as an average of the values for the four items. The TI subscale was developed and validated using confirmatory factor analysis. In addition, the measure showed good reliability with a Cronbach's alpha of .77, above the .70 threshold. In addition, Cammann et al.'s (1979) work demonstrated relatively good convergent validity vis-à-vis other measures of turnover intention available at the time. More recently, Blytt et al. (2022) also used the Michigan Organizational Assessment Questionnaire's TI subscale in their study on nurse turnover intention. Specifically, they looked at how shift disorder may impact TI among nurses. In addition, Blytt et al. (2022) found that the Michigan Organizational Assessment Questionnaire's TI subscale demonstrated high internal consistency ($\alpha = 0.94$). Therefore, the Michigan Organizational Assessment Questionnaire's TI subscale was appropriate for use in this study.

Employee Engagement Measure

The dependent or outcome variable of work engagement was measured using the Utrecht Work Engagement Scale-9 (UWES-9). The UWES-9 is the shortened version of the original 17-item Utrecht Work Engagement developed by Schaufeli et al. (2006b). The UWES-9 has three subscales of vigor, absorption, and dedication, each comprising three items. The UWES-9 is measured on a 7-point scale from 0, *never*, to 6, *always*. An example item of this scale is "I am proud of the work that I do" (Schaufeli et al., 2006b, p. 714). The Cronbach's alpha of the UWES-9's three dimensions ranges from .89 to .97 (Schaufeli et al., 2006b). This indicates strong to nearly perfect reliability. Balducci et al. (2010) and Tran et al. (2020) support the scale's reliability and validity. For example, Tran et al. (2020) found that the vigor, absorption, and dedication subscales had Cronbach's alpha .93, .86, and .77, respectively. Regarding validity, Schaufeli et al. (2006b) demonstrated that the instrument's factor structure was held up under two separate confirmatory factor analyses in different contexts. Validity was established by demonstrating negative correlations between the factors of the UWES-9 and a common measure of burnout, which is the opposite of work engagement. Discriminant validity was also supported by Schaufeli et al. (2006b). For each dimension, the score is created by averaging the scale items. An overall score can be developed by averaging the three subscales.

Job Satisfaction Scale

A single global JS item measured job satisfaction. Following the guidance of Cammann et al. (1979) and the example of Solomon et al. (2021), the following single question was used to assess JS. This item reads, "All things considered, how satisfied are you with your job" (Solomon et al., 2021, p. 1231). This item used a 10-point Likert scale ranging from 0 (*totally dissatisfied*) to 10 (*totally satisfied*). According to Solomon et al. (2021), the global job

satisfaction item is strongly correlated (r = .85) with dimensions of "the work itself," "total pay," "hours worked," "job security," and "flexibility (p. 1231). The literature well supported the notion of using single-item JS scales (Solomon et al., 2021; Wanous et al., 1997). The observed correlation between the single item and previously used multi-item scales is .63, with a corrected mean correlation of .67, indicating convergent validity. Single items reduce participants' effort while collecting similar data, making them desirable in multi-scale surveys (Wanous et al., 1997).

Data Collection

Prior to any data collection, site authorization and institutional review board (IRB) approval for the study were sought. This involved contacting the moderators of the Facebook and LinkedIn groups identified, as well as the allied healthcare professional associations and boards identified in the sampling section.

A recruitment message was prepared to recruit participants, the text of which was also used in the body of the email or posted to the allied healthcare professional group moderators (see Appendix B). This invitation message described this study, its purpose, and what was required of participants (see Appendix B). The invitation message also contained a link to the combined five-part survey on the Qualtrics survey-hosting platform, which included an informed consent document. Once a given site's authorization was obtained, the message was provided to the administrative staff of the message board, or, in the case of the social media groups, the post was made. Prospective participants then clicked on the link to the Qualtrics site to participate.

Upon reaching the survey, participants were directed to an informed consent form (see Appendix C). This page describes the study in greater detail. It emphasized the anonymity of data collection, the voluntary nature of participation, and information regarding how long the

survey was expected to take. The informed consent page also informed participants they could withdraw from the study by navigating away from the page (or opting out on the final question) before the final submission page so that I would exclude their partial answers. Once the participants agreed to sign the informed consent form, they were directed to a brief set of questions confirming their eligibility for participation. Once eligibility was confirmed, participants could continue with the main survey, which consisted of five sets of survey items discussed in the instrumentation section previously discussed. Once participants completed the survey (or were identified as not eligible), they were thanked for their time and were provided with a link to a second survey to enter the prize draw. The survey remained open for approximately 1 week before meeting the minimum sample size.

Data Analysis

Once the survey closed, the data were downloaded from Qualtrics, screened for evidence of inattentive or inauthentic responses (see Chapter 4), and imported into SPSS statistical analysis software for analysis. Before analysis, the data were checked for completeness, and any substantially incomplete responses were excluded from the analysis. Data analysis comprised two phases: descriptive and inferential. In the descriptive phase, two steps were taken. First, the demographic data were tabulated and presented to characterize the sample. Then, the independent and dependent variables were characterized in terms of their important statistical properties, such as mean, range, and standard deviation. Means were calculated for the overall subscales and scales. Cronbach's alphas were also calculated for each scale. Once the descriptive analysis was complete, an inferential analysis was used to answer the research questions.

The three research questions were answered using a series of three Pearson's product-moment correlation coefficients (r). Pearson's r is a bivariate analysis that determines the degree

and direction of the correlation between two variables (Gupta & Kapoor, 2020; Sharma, 2005). A separate Pearson's *r* was calculated to answer each of the three research questions, but the same process was followed. Before this analysis, the assumptions of this statistic were tested. These assumptions are the continuous nature of the data (implicit in the Likert scale values); the rough linearity of the relationship, which was assessed by visual plots (histograms); the absence of outliers, which was assessed using box plots; and the normality of the variables, were assessed using the Shapiro-Wilk test or histograms (Gupta & Kapoor, 2020). If the assumptions were not satisfied, a nonparametric Spearman's rho test would be used instead.

Once assumptions were validated, Pearson's *r* was calculated for each pair of variables. In each case, the coefficient must significantly differ from 0 to reject the associated null hypothesis (Sharma, 2005). If the coefficient is significant, then further information about the relationship may be contained in the sign and magnitude of the coefficient. A positive sign indicates a direct relationship, while a negative sign indicates an inverse relationship. In addition, the absolute value of the coefficient's closeness to 1 indicates a stronger relationship or a weaker relationship near 0 (Sharma, 2005). In Research Question 1 (RQ1), the variables tested were WS and TI. In Research Question 2 (RQ2), the variables were WS and JS. In Research Question 3 (RQ3), the variables were WS and EE.

Ethical Considerations

Ethical research practices were adhered to at every stage of the research. Both IRB approval and the appropriate site authorizations were obtained before any data collection (see Appendix E). All participation in the study was voluntary and anonymous, and no identifying information was collected. The incentives used in the study were small enough not to be coercive. Informed consent was ensured by confirming that participants agreed to the informed

consent before continuing the survey. Participation in the prize draw was in a separate survey (linked from the main survey) to ensure participants' data was anonymous. Therefore, although the study addressed the potentially sensitive issues of TI, EE, and JS, it was not expected to represent any risk to participants because of the anonymity of the data collection. No one was able to connect a given response with a specific participant. Overall, the participants of this study were not considered a vulnerable population. The nature of the questions was not personally intrusive or likely to cause any distress, being similar to thoughts, experiences, and surveys encountered daily. Hence, the study was considered to have minimal risk to the participants. Furthermore, because this study was quantitative in nature, the results spoke for themselves, and a reader could consult tables and statistical values reported to ensure they found this study's conclusions to be accurate and unbiased within the stated limitations.

Assumptions

Assumptions are foundational aspects of the research that cannot be verified and must be assumed to hold (Babbie, 2010). There were several assumptions present in the proposed study. First, it was assumed that participants provided complete and accurate responses to the survey items. The anonymity of data collection supported this assumption. Second, it was assumed that quantitative data collection could yield meaningful results for the research topic. This assumption was supported by quantitative measures such as those used in this study. In addition, existing quantitative research addressed similar topics. Third, it was assumed that sufficient allied health workers would be willing to participate in this study to achieve the minimum necessary sample size and resultant statistical power. This assumption was supported by the emphasis on the research's value in recruitment materials.

Delimitations

Delimitations are deliberately imposed boundaries on a study (Babbie, 2010). Delimitations are put in place to make the study feasible and relevant. There were several delimitations in this study. First, in alignment with the research gap, this study was delimited to allied healthcare workers. Second, this study was geographically delimited to the United States but not delimited more narrowly because the sampling frames allowed for a sample to be drawn from the entire country. Third, this study was also delimited to the specific variables of WS and three job outcomes, TI, JS, and EE, in alignment with the research questions and, more broadly, the research gap.

Chapter Summary

In summary, the purpose of this quantitative correlational study was to examine the relationship between WS and three job outcomes, TI, JS, and EE, in allied healthcare workers in the United States. The independent variable was WS. The dependent variables were TI, EE, and JS. The research methodology was quantitative, and the specific research design was correlational. The population of interest, or group I hoped to learn something about, was allied healthcare workers in the United States. The data collection for this study involved an online survey questionnaire comprising five sections: (a) demographic items, (b) workplace spirituality, (c) turnover intention, (d) employee engagement, and (e) job satisfaction. The survey was hosted on Qualtrics, and participants were recruited through professional associations and boards on social media. A minimum sample size of 120 participants was the target sample size. Data were analyzed using Pearson product-moment correlation coefficients to answer the research questions. The results of that analysis are presented next in Chapter 4.

Chapter 4: Results

Chapter 4 of this quantitative correlational study starts by reviewing the purpose and research questions investigated by the study. This chapter briefly summarizes the research design, techniques used to collect primary data, sample size, data cleansing procedures, and methods used in analyzing the data. Thereafter, the findings of the study are reported. A descriptive analysis was conducted to summarize the demographic details of the survey participants. A correlational analysis was used to address the study's primary objectives, examining the relationships between the study variables.

Purpose of the Study

The study's purpose was to examine the relationship between WS and three job outcomes. The job outcomes (dependent variables) were TI, JS, and EE. The analysis was expected to reveal a positive effect of WS on both JS and EE and a negative effect of WS on TI.

Research Questions

The research focused on answering the following research questions:

RQ1: What relationship does workplace spirituality have with turnover intention among U.S. allied health professionals?

RQ2: What relationship does workplace spirituality have with job satisfaction among U.S. allied health professionals?

RQ3: What relationship does workplace spirituality have with employee engagement among U.S. allied health professionals?

Data Collection

The study was conducted with participants who are allied healthcare professionals in the United States who were recruited using a purposive sampling method. The research instrument

was distributed to allied healthcare workers using Facebook groups. The data collection for the study was an online survey hosted on Qualtrics's online survey platform. This survey was comprised of a consent form and five sections, which were (a) demographic items and qualifying questions, (b) EE scale, (c) JS scale, (d) TI scale, and (e) WS scales.

The initial survey gathered 1,484 attempted responses, where participants opened and interacted with the survey. However, this completed dataset was then checked for its integrity using several methods. The data revealed some bots (Internet robots or automated software mimicking human participants) were responding (e.g., repetitive, or illogical responses at the same time, of the same content or length, or within seconds of each other). No bot responses were found in the first 2 days. Responses that took less than 240 seconds were considered bots or inattentive humans, based on my experimenting with the time taken to read the survey and respond to each question. Individuals who did not agree to the consent and final additional consent question (confirming they did not wish to withdraw) were also excluded.

Patterns in the data were examined to identify the potential bots (e.g., response starting and ending times, response duration, similar or identical responses, responses with repetitive patterns, irrelevant responses). After careful consideration of the responses, I was able to filter 84 genuine responses from the initial dataset. However, I intended to collect more data, and the Qualtrics survey was distributed again among a few more allied healthcare worker groups on Facebook. In this second round of data collection, potential bots or inattentive respondents were identified using additional filtering tools available on the Qualtrics survey platform. In addition, only closed-membership Facebook groups were used for the second round of data collection. The additional filters were as follows:

- Open-ended questions to confirm participants' allied healthcare profession selected from the drop-down option for the profession they selected.
- Several scores provided by Qualtrics, including Captcha, duplication likelihood, and fraud likelihood. All these features are passive (except Captchas), so participants are not aware of them.

I collected 1,115 responses from the second round of the survey. Given that some responses were flagged by Qualtrics as likely to be fraudulent, the same procedure was conducted as explained for the initial round to identify bot answers, with the added use of Qualtrics scoring for fraud, duplication, and other concerns. Accordingly, I gained a total of 49 genuine responses in the second round of surveys. I applied a strict approach to selecting responses, so where responses were in question, they were rather excluded. A total of 133 responses were, therefore, included in the data analysis.

Preparation of Data for Analysis

The responses from the survey were downloaded from the Qualtrics survey platform, reviewed in Excel, and then imported into the IBM SPSS software. The data were checked for completeness and any substantially incomplete responses, which included removing responses with missing values from the analysis, as discussed earlier. I used both descriptive analysis and inferential analyses to achieve the study's objectives. The demographic data were tabulated and presented in the following sections to characterize the sample. Then, the independent and dependent variables were characterized in terms of their important statistical properties (measures of distribution), such as mean, range, and standard deviation. Thereafter, the normality was checked before proceeding to the inferential statistics (using histograms with normal distribution curves). Cronbach's alpha coefficients were also calculated to identify the reliability

of the scales. I used Pearson's product-moment correlation coefficients to determine the relationships between the independent and dependent variables.

Descriptive Statistics

A total of 133 participants were included in the study. The sample descriptors are presented in Table 1. In terms of age, most participants were between 31 and 40 years old (n = 39, 29.3%). About 27.8% of participants were aged 41 to 50 years old (n = 37), and 17.3% of participants were aged 21 to 30 years old (n = 23). In terms of gender, there were 45 male (33.8%) and 87 female participants (65.4%). Most of the participants were White (n = 65, 48.9%) and Black or African American (n = 38, 28.6%). For religion, 35 participants described themselves as religious but not spiritual (26.3%), 36 participants described themselves as spiritual but not religious (27.1%), and 50 participants described themselves as religious and spiritual (37.6%). For the tenure in their current role, 28.6% of participants reported being in their role for 2 to 5 years (n = 38), while 24.8% of participants reported being in their role for 6 to 10 years (n = 33). For the job profession, most participants described working as an imaging technologist (n = 51, 38.3%), followed by medical technologist (n = 14, 10.5%), and nursing assistant or nurse technologist (n = 15, 11.3%). For the location of the facility (see descriptions in Table 1) they work in, 37.6% of participants were suburban (n = 50), 34.6% of participants were urban (n = 46), 22.6% of participants were micropolitan (n = 30), and 4.5% of participants were in rural areas (n = 6). For the percentage of low-income patients in the facility participants worked in, 38 participants reported less than 40% (28.6%), 74 participants reported 41 to 60% (55.6%), and 21 participants reported 60% or more (15.8%). For the number of healthcare professionals at the facility participants worked in, 28 participants had 11 to 25 healthcare

professionals (21.1%), 37 participants had 26 to 100 healthcare professionals (27.8%), and 29 participants had 101 to 500 healthcare professionals (21.8%).

Table 1

*Frequencies and Percentages of Demographic Characteristics (*N *= 133)*

Demographic category		*f*	%
Age	18–20 Years	4	3.0
	21–30 Years	23	17.3
	31–40 Years	39	29.3
	41–50 Years	37	27.8
	51–60 Years	22	16.5
	61 Years and older	7	5.3
	Missing	1	0.8
Gender	Male	45	33.8
	Female	87	65.4
	Missing	1	0.8
Ethnicity	Hispanic	10	7.5
	White	65	48.9
	Black or African	38	28.6
	American Indian and/or Alaska Native	7	5.3
	Asian	3	2.3
	Multiracial Non-Hispanic	3	2.3
	Other	2	1.5
	Prefer not to answer	5	3.8
Religious Description	Religious and spiritual	50	37.6
	Religious but not spiritual	35	26.3
	Spiritual but not religious	36	27.1
	Not religious or spiritual	12	9.0
Tenure in Current Role	0–1 year	9	6.8
	2–5 years	38	28.6
	6–10 years	33	24.8
	11–15 years	19	14.3
	16 or more years	32	24.1
	Prefer not to answer	2	1.5

Demographic category		*f*	%
Job profession	Phlebotomy technologist, EKG technologist	7	5.3
	Nursing assistant, nurse technologist	15	11.3
	Imaging technologist	51	38.3
	Respiratory therapists	12	9.0
	Medical technologists	14	10.5
	Physical therapists, occupational therapists	4	3.0
	Pharmacy technologist	7	5.3
	Medical assistants	5	3.8
	Other	16	12.0
	Prefer not to answer	1	0.8
	Missing	1	0.8
Location of the facility	Urban (in a large central metropolitan city area)	46	34.6
	Suburban (on the fringe of a large metropolitan city area)	50	37.6
	Micropolitan (small to medium metropolitan city)	30	22.6
	Rural (in a nonmetropolitan area)	6	4.5
	Missing	1	0.8
Percentage of low-income patients of the facility	Less than 40%	38	28.6
	41–60%	74	55.6
	60% or more	21	15.8
Number of healthcare professionals at the facility	Less than 10 healthcare professionals	12	9.0
	11–25 healthcare professionals	28	21.1
	26–100 healthcare professionals	37	27.8
	101–500 healthcare professionals	29	21.8
	> 500 healthcare professionals	26	19.5
	Missing	1	0.8

Table 2 presents the descriptive statistics for the study variables, which include the TI, EE, JS, and WS scales. The reliability coefficients for these scales are also presented in Table 2 with the assumption that above .70 is acceptable. As observed, the Cronbach's alpha values for employee engagement subscales ranged from .61 to .69. However, the overall employee engagement scale has a Cronbach's alpha of .83. Based on a review of Schaufeli et al. (2006a), employee engagement can be used as a unifactorial scale, and this approach is as valid as using

the subscales. Hence, I proceeded to use the whole scale score, which appears more reliable. The TI scale had a Cronbach's alpha value of .70. The overall WS scale had a Cronbach's alpha of .86. The WS subscales had Cronbach's alphas of .76 for meaningful work (MW), .70 for sense of community (SC), and .87 for alignment with organizational value (AOV). No alpha was reported for JS, as it was a single-item scale. Thus, the items appear to be internally consistent in measuring the constructs for the study.

Table 2

Descriptive Statistics for the Study Scales

Scale	*N*	Cronbach's alpha	Min	Max	*M*	*SD*
EE	133	.83	1.11	5.89	3.66	0.86
JS	133	-	1.00	10.00	7.03	1.92
TI Scale	133	.70	1.00	7.00	3.75	1.33
WS Scale—MW Subscale	133	.76	1.75	7.00	5.09	1.10
WS Scale—SC Subscale	133	.70	2.25	7.00	5.07	0.99
WS Scale—AV Subscale	133	.87	1.00	7.00	4.71	1.34
WS Scale—Overall	133	.86	2.25	7.00	4.96	0.92

The mean value for overall EE was 3.66 (*SD* = 0.86), which was closest to the *sometimes* anchor of the scale. The JS scale had a mean of 7.03 (*SD* = 1.92), which was closest to the *agree* anchor, while the TI scale had a mean of 3.75 (*SD* = 1.33), which was closest to the *neither agree nor disagree* anchor of the scale. For the WS subscales, MW had a mean of 5.09 (*SD* = 1.10), SC had a mean of 5.07 (*SD* = 0.99), and AOV had a mean of 4.71 (*SD* = 1.34). The overall

WS scale had a mean of 4.96 (*SD* = 0.92). All WS subscales and overall scores were closest to the *slightly agree* scale anchor.

Findings

Related to the three research questions, the goal of the analyses was to examine the relationship between WS and three job outcomes: TI, JS, and EE. The analysis was expected to reveal a positive effect of WS on both JS and EE and a negative effect of WS on TI.

The results of the correlational analyses (Pearson product-moment correlation coefficients) are presented in Table 3. Where positive correlations were reported, this means that the independent variable increases with the dependent variable, while negative correlations showed that when the independent variable increases, the dependent variable decreases. Correlation coefficients below .30 are considered weak, correlations between .30 and .50 are seen to be moderate, and correlations above .50 are considered strong (Cohen, 1988).

Table 3

Correlation Matrix for Study Variables

Variable demographics	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. WS–MW											
2. WS–SC	.54**										
3. WS–AV	.34**	.55**									
4. WS Overall	.76**	.84**	.82**								
5. EE	.63**	.43**	.42**	.61**							
6. JS	.47**	.47**	.48**	.59**	.57**						
7. TI	-.34**	-.46**	-.56**	-.57**	-.39**	-.54**					
8. HC Professionals	.22*	0.04	-.18*	0.02	0.00	-0.02	-0.01				
9. Low Income	-0.02	-0.05	0.03	-0.01	0.04	0.02	-0.02	0.03			
10. Tenure	.28**	.19*	-0.12	0.12	0.14	0.06	-0.02	.40**	-0.05		
11. Age	.22*	0.09	-0.16	0.05	0.16	-0.01	0.02	.33**	0.05	.66**	
12. Gender	0.05	0.03	-0.10	-0.02	-0.07	-0.15	0.05	.26**	-0.03	.26**	.31**

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

N = 133, except for age and gender correlations where n = 132

For RQ1, as shown, TI was significantly and negatively correlated with the WS subscales. WS–MW was significantly, moderately, and negatively correlated with TI (r = -.34, p < .01). WS–SC was also significantly, moderately, and negatively correlated with TI (r = -.46, p < .01). Similarly, WS–AV was significantly, moderately, and negatively correlated with TI (r = -.56, p < .01). The overall WS (r = -.57, p < .01) was significantly, strongly, and negatively correlated with TI.

For RQ2, JS was also positively correlated with the WS subscales. WS–MW was significantly, moderately, and positively correlated with JS ($r = .47$, $p < .01$). Similarly, WS–SC was significantly, moderately, and positively correlated with JS ($r = .47$, $p < .01$). WS–AV was also significantly, moderately, and positively correlated with JS ($r = .48$, $p < .01$). The overall WS scale ($r = .59$) was also significantly, strongly, and positively correlated with JS.

For RQ3, WS–MW was significantly, strongly, and positively correlated with employee engagement ($r = .63$, $p < .01$). WS–SC was significantly, moderately, and positively correlated with employee engagement ($r = .43$). WS–AV also significantly, moderately, and positively correlated with employee engagement ($r = .42$). EE was significantly positively, moderately, and positively correlated with overall WS score ($r = .61$, $p < .01$). Therefore, these analyses show that when WS increases EE and JS increase, but TI decreases, with most of the correlations being in the moderate to strong range.

Correlation analyses were also conducted between study variables and the demographic characteristics of participants to identify potential covariates (with moderate to strong effect sizes) such as the number of healthcare professionals working in the participant's facility, the low-income status of the community where participants work, tenure, age, and gender. Small group sizes did not allow analysis by group for professions. Additional analyses (e.g., ANOVA) are presented later in this section to address location, religion, and race–ethnicity as potential covariates. A significant, positive, but weak correlation was observed between the number of healthcare professionals and WS–MW ($r = .22$, $p < .05$) and WS–AV ($r = .18$, $p < .05$). A significant, positive, and weak correlation was also observed between tenure and WS–MW ($r = .28$, $p < .01$) as well as WS–SC ($r = .19$, $p < .05$). A significant, positive, but weak correlation was also observed between age and WS–MW ($r = .22$, $p < .05$). No significant correlations were

observed between age and WS–SC, WS–AV, or WS overall. There were also no significant correlations between low-income community locations and the study variables or for gender and the study variables. Notably, the significant correlations above are considered weak and were not investigated further as they explain little of the variance in the study variables.

An analysis of variance test was conducted to determine whether there are significant differences in the study variables of EE, JS, TI, WS–MW, WS–SC, WS–AV, and WS overall based on religious-spiritual preference. The descriptive statistics are presented in Table 4. As observed, the mean EE was highest for the spiritual but not religious group (M = 3.73, SD = .77). The mean JS was highest for the spiritual but not religious group (M = 7.39, SD = 1.57). The mean TI was highest for the religious and spiritual (M = 3.97, SD = 1.38). For the WS scores, the highest mean score for WS–MW (M = 5.40, SD = 0.89), WS–SC (M = 5.25, SD = 0.99), WS–AV (M = 5.15, SD = 1.11), and WS overall (M = 5.26, SD = 0.84) was for the not religious or spiritual group. However, the results of the ANOVA tests determined that there are no significant differences in the variables of EE, JS, TI, and WS scores based on spiritual-religious grouping (p > .05). The effect sizes (Eta Squared or η^2) as measured ranged from .01 to .05, which indicated that the effect sizes were small (< 5%). While Levene's test indicated a lack of homogeneity in the variance for the groups, this assumption is only applicable where group sizes are notably unequal (Laerd Statistics, 2018).

Table 4

Descriptive Statistics and ANOVA of Study Variables Based on Religious Descriptions

Variable	Religious and spiritual		Religious but not spiritual		Spiritual but not religious		Not religious or spiritual				Effect size
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*	η^2
EE	3.69	0.96	3.52	0.82	3.73	0.77	3.69	0.76	0.398	0.76	0.01
JS	6.92	2.17	6.71	1.99	7.39	1.57	7.33	1.5	0.888	0.45	0.02
TI	3.97	1.38	3.83	1.1	3.55	1.42	3.19	1.38	1.5	0.22	0.03
WS–MW	5.17	1.06	4.68	1.25	5.28	0.99	5.4	0.89	2.464	0.07	0.05
WS–SC	5.05	0.95	4.86	1.06	5.25	0.95	5.25	0.99	1.083	0.36	0.03
WS–AV	4.61	1.35	4.63	1.41	4.78	1.35	5.15	1.11	0.594	0.62	0.01
WS Overall	4.94	0.86	4.72	1.02	5.1	0.9	5.26	0.84	1.544	0.21	0.04

A dummy variable was created for the ethnicity representing the White participants as 0 and all other races as 1, given that the majority were White and there were smaller numbers for other race groups, allowing similar comparison group sizes. After conducting an initial scouting correlation between the ethnicity dummy variable and all study variables (see Table 5), significant correlations were noted between ethnicity and WS Overall ($r = -.18$, $p < .05$) and ethnicity and WS–SC ($r = -.19$, $p < .05$), where other correlations were weak or insignificant.

Table 5

Correlation Analysis Results With EE Dummy Variable

Variable	WS–MW	WS–SC	WS–AV	WS Overall	EE	JS	TI
EE-Dummy	-0.12	-.19*	-0.13	-.18*	-0.08	-0.15	0.00

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

As a follow up, independent samples *t* tests were conducted to determine whether there was a significant difference between Whites and non-Whites on WS–SC and WS. The descriptive statistics are presented in Table 6. The WS–SC score has a higher mean for the White group (M = 5.26, SD = .80) as opposed to the non-White group (M = 4.89, SD = 1.12). The WS score has a higher mean for the White group (M = 5.13, SD = .79) as opposed to the non-White group (M = 4.79, SD = 1.00). The result of the independent samples *t* tests was that there were significant differences between White and non-White groups in terms of the WS–SC (t = 2.22, p = .03) and WS Overall (t = 2.11, p = .04) scores. The Cohen's d effect size was also determined to be .38 for the WS–SC and .37 for WS, indicating a medium effect size or that the strength of the relationship is moderate. This suggests some differences in WS for this sample.

Table 6

Independent Samples t *Test of WS-SC Based on Ethnicity*

EE-Dummy		*N*	*M*	*SD*	*SE Mean*	*t*	*df*	*p*	*Cohen's d*
WS–SC	White	65	5.26	0.80	0.10	2.22	121.29	.03	.38
	Non-White	68	4.89	1.12	0.14				
WS–AV	White	65	5.13	0.70	0.10	2.11	126.66	.04	.37
	Non-White	68	4.79	1.00	0.12				

An additional step was taken to compare Whites and non-Whites on the strength of the relationship between WS–SC and EE, JS, and TI, and WS overall and EE, JS, and TI. Correlations were calculated for each group and then compared using Fisher r-to-z transformations to determine if the correlations were significantly different. Fisher r-to-z transformation is a formula to transform Pearson's correlation coefficient *r* to a value *Zr*, which can be used to calculate the confidence interval for the difference in Pearson's correlation coefficients (Beehner & Blackwell 2016). Significant differences were identified in the correlations between WS–SC and WS overall with JS. For Whites, the correlation between WS overall and JS was $r = .415$ ($p < .001$, $n = 65$), while for non-Whites, the correlation between WS overall and JS the correlation was $r = .696$ ($p < .001$, $n = 68$), which results in a significant value using the Fisher r-to-z transformations: $z = -2.35$ ($p = .02$). Significant differences were identified in the correlations between WS–SC and JS. For Whites, the correlation between WS–SC and JS was $r = .266$ ($p < .05$, $n = 65$), while for non-Whites, the correlation between WS–SC and JS the correlation was $r = .590$ ($p < .001$, $n = 68$), which results in a significant value using the Fisher r-to-z transformations: $z = -2.28$ ($p = .02$). This suggests that some of the relationships in RQ2 differ for Whites and non-Whites, with correlations between WS–SC and JS and WS overall and JS being stronger for non-Whites.

A series of analysis of variance tests were also conducted to determine whether there is a significant difference in study variables of EE, JS, TI, and WS scores based on location groups. The location groups are urban, suburban, and micropolitan, with rural being excluded from the comparison due to its small group size ($n = 6$). Based on the descriptive statistics presented in Table 7, the highest mean score for EE ($M = 3.69$, $SD = 0.84$) and JS ($M = 7.10$, $SD = 2.16$) was observed for micropolitan while the highest mean score for TI was suburban ($M = 4.03$, $SD =$

1.25). The mean WS–MW (*M* = 5.24, *SD* = 0.89), WS–SC (*M* = 5.33, *SD* = 0.89), WS–AV (*M* = 4.97, *SD* = 1.13), and WS Overall (*M* = 5.18, *SD* = 0.79) were also highest for the micropolitan group. The results of the ANOVA tests determined that there are no significant differences in the variables of EE, JS, TI, and WS scores based on location ($p > .05$). The effect sizes, as measured using Eta Squared scores, ranged from .00 to .03, which indicated that the effect sizes were small. Thus, the strength of the relationship between location and the study variables is weak, and no further investigation of location as a covariate was completed.

Table 7

Descriptive Statistics and ANOVA of Study Variables Based on Location

Variable	Urban		Suburban		Micropolitan				Effect
	M	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*	size
EE	3.67	0.82	3.59	0.91	3.69	0.84	0.143	0.87	0.00
JS	6.83	2.24	7.08	1.51	7.1	2.16	0.26	0.77	0.00
TI	3.63	1.39	4.03	1.25	3.6	1.41	1.447	0.24	0.02
WS–MW	5.22	1.12	4.82	1.22	5.24	0.89	2.054	0.13	0.03
WS–SC	5.04	1.13	4.97	0.93	5.33	0.89	1.246	0.29	0.02
WS–AV	4.73	1.52	4.53	1.33	4.97	1.13	0.977	0.38	0.02
WS Overall	5	1.07	4.77	0.87	5.18	0.79	1.847	0.16	0.03

Chapter Summary

The purpose of this study was to examine the relationship between WS and three job outcomes: TI, JS, and EE. A sample of 133 participants was included in the study. A series of correlation analyses were conducted to address the study's research questions. The results of the analyses determined that there was a negative relationship between workplace spirituality and turnover intention. The results also determined that there is a positive correlation between

workplace spirituality and job satisfaction. There is also a positive correlation between workplace spirituality and employees. The results of the study are discussed in the next chapter.

Chapter 5: Discussion, Conclusions, and Recommendations

Allied healthcare professionals who are dissatisfied, disengaged, or thinking of leaving their organization act as a potential cost and threat to their organizations because healthcare organizations face high financial costs associated with staff turnover (Hashish, 2017). As a result, organizations that experience employee turnover report a decline in organizational productivity due to knowledge loss (Cho & Song, 2017). Moreover, employees who experience emotional exhaustion exhibit increased burnout, turnover rates, reduced empathy toward patients, and decreased productivity (Shreffler et al., 2020). This study focused on WS as a potential factor that might decrease TI and increase JS and EE for healthcare professionals.

Purpose Statement

The purpose of this quantitative correlational study was to examine the relationship between WS and three job outcomes, TI, JS, and EE (dependent variables), among allied healthcare workers in the United States. The independent variable was WS. Measures of WS also included the three subscales of MW, SC, and AOV.

Research Questions

This study focused on the following research questions:

RQ1: What relationship does workplace spirituality have with turnover intention among U.S. allied health professionals?

RQ2: What relationship does workplace spirituality have with job satisfaction among U.S. allied health professionals?

RQ3: What relationship does workplace spirituality have with employee engagement among U.S. allied health professionals?

Method Summary

This study's research methodology was quantitative, and the data were collected using an online survey. The population of interest was allied healthcare workers in the United States. A sample from the population of interest was recruited through professional associations and boards on social media. The survey was hosted on Qualtrics and was comprised of five sections that included (a) demographic items, (b) WS, (c) TI, (d) JS, and (e) EE. Data were analyzed by calculating correlation coefficients. In this chapter, a discussion of the findings of this study is offered as related to the past literature reviewed and their theoretical implications. Next, practical implications and recommendations for future research are discussed in depth based on the study's findings. Then, a discussion of the study's limitations is provided, and conclusions that summarize the key points of this chapter are presented.

Discussion of Findings

The main finding from this study was that higher WS predicted increased JS and EE and decreased TI among the sampled allied healthcare professionals. This key finding is discussed in further depth, along with how supporting findings answered the research questions.

Research Question 1

In answering the first research question, what relationship does WS have with TI among U.S. allied health professionals? WS was significantly, strongly, and negatively correlated (r = -.57, p < .01) with TI. TI was also significantly and negatively correlated with the WS subscales: WS–MW (r = -.34, p < .01), WS–SC(r = -.46, p < .01), and WS–AV (r = -.56, p < .01).

Although the prior research is limited, a few studies were found that also explored the relationship between WS and TI outside of the United States. Previous researchers noted a significant relationship between WS and TI. For example, Bhaskar and Mishra (2019) found WS

improved employee career satisfaction and moderated the relationship between perceived organizational support and TI, resulting in fewer employees leaving the organization. Similarly, Jena and Pradhan (2018) proposed that HR executives who implement WS practices create an organizational culture that promotes EE, JS, and retention, resulting in lower TI. In a related study, Jena and Pradhan (2018) found that WS could improve employee retention in various workplaces in India. Therefore, previous research has found that WS could reduce TI among employees (Bhaskar & Mishra, 2019; Jena & Pradhan, 2018; Siswanto & Falabiba, 2020).

Specific to the healthcare sector, Fitriasari (2020) completed a study examining WS on TI among nurses. Fitriasari (2020) found that WS could have a negative impact on TI, particularly through social support in many forms, that could inversely impact (reduce) nurses' feelings of burnout and intentions to leave their jobs. Hence, the present study's findings agree with past studies in both other sectors and healthcare. However, the present study's findings are unique in focusing on allied healthcare workers in the United States. While causality cannot be inferred in correlational and cross-sectional studies, it seems likely that increased WS is associated with reduced TI; this relationship, along with relationships between the other variables, is discussed in the theoretical and practical implications section.

Research Question 2

In answering the second research question, what relationship does WS have with JS among U.S. allied health professionals? WS was significantly, strongly, and positively correlated (r = .59) with JS. JS was also significantly and positively correlated with the WS subscales of WS–MW with JS (r = .47, p < .01), WS–SC with JS (r = .47, p < .01), and WS–AV with JS (r = .48, p < .01). Regarding demographic variables, race or ethnicity was found to be a significant covariate for the WS–SC and JS relationship. For Whites, the correlation between WS–SC and

JS was $r = .27$ ($p < .05$, $n = 65$), while for non-Whites, the correlation between WS–SC and JS the correlation was $r = .59$ ($p < .001$, $n = 68$). This additional finding suggests that the correlation between WS–SC and JS was stronger for non-Whites.

Previous research has focused on the relationship between WS and JS within the healthcare sector. Researchers who focused specifically on the healthcare sector (e.g., nursing) found that WS, and spirituality in general, had a positive relationship with healthcare workers' JS and connectedness with coworkers, patient outcomes, and organizational effectiveness (Celano et al., 2022). For example, Celano et al. (2022) found that nurses' spirituality helped them navigate the pressures of their respective positions and resulted in lower levels of burnout. Further, Iyer and Deshmukh (2018) also researched WS among nurses by studying the relationship between job stressors and JS and found that WS moderated this relationship. Iyer and Deshmukh (2018) also found that nurses with higher self-reported levels of WS were more likely to experience higher levels of community with supervisors and, in turn, experience increased supervisor support, which also led to higher levels of JS. Finally, Abbas et al. (2021) studied WS and JS among pharmaceutical employees. Abbas et al. (2021) surveyed 300 employees from various pharmaceutical companies and found that the components of WS (spiritual orientation, compassion, meaningful work, alignment of values) were positively related to JS. Further, they concluded that WS is an antecedent of JS.

Concerning the healthcare sector specifically, the findings of this current study are congruent with previous research (Zaidi et al., 2019). Zaidi et al. (2019) surveyed 250 employees from the healthcare sector and found, like Abbas et al. (2021), that spiritual orientation, compassion, meaningful work, and alignment of values are positively correlated with JS.

Regarding the significance of demographic variables as covariates, a cross-sectional national study conducted by Garcia et al. (2020) found that ethnicity was linked to JS among a sample of physicians in the United States, with specific findings indicating that non-Hispanic Black physicians were more likely to report satisfaction with work–life integration compared with non-Hispanic White physicians. The present study's finding that non-Whites had a stronger relationship between WS–SC and JS does not address the same issue but indicates that race and ethnicity may be a factor for further consideration in studies of WS and JS where WS may play a role in individual (e.g., sense of purpose) and social identity (e.g., being a responsible community member).

Therefore, consensus was found in the small body of literature to date that a positive relationship exists between WS and JS in the healthcare sector (Abbas et al., 2021; Zaidi et al., 2019). However, this prior research appears to be quite limited when focusing on the relationship between WS and JS among allied healthcare professionals. Additionally, research is sparse on the significance of WS and demographic variables, indicating the need for future research to support or refute the findings of this current research.

Research Question 3

In answer to the third research question, what relationship does WS have with EE among U.S. allied health professionals?, overall, WS was significantly, positively, and moderately correlated with EE ($r = .61$, $p < .01$), WS–MW was significantly, strongly, and positively correlated with EE ($r = .63$, $p < .01$), and WS–SC and WS–AV were significantly, moderately, and positively correlated with EE ($r = .43$, $p < .05$), ($r = .42$, $p < .05$).

Previous research focused on the relationship between WS and EE within the healthcare sector. For example, Cruz et al. (2022) studied the effects of WS on nurses' EE in Saudi Arabia.

They found that hospitals that provided employees with a strong sense of WS significantly and positively impacted nurses' work engagement, with varying levels of vigor and absorption reported by different hospitals according to those hospitals' levels of WS. Almotawa and Shaari (2019) determined that WS positively influenced EE among 225 employees in the healthcare sector. Iqbal et al. (2021) also studied job engagement among nurses in Indonesia and found that WS positively impacted these nurses' work engagement. However, neither of these studies focused research on allied healthcare professionals in the United States.

Consensus is evident in recent studies that WS positively impacts EE in the healthcare sector (Almotawa & Shaari, 2019; Cruz et al., 2022; Iqbal et al., 2021). The findings from the present study that answered RQ3 align with this consensus. The present study's findings extend the literature by offering quantitative data regarding the relationship between WS and EE for allied professionals, including WS–MW, WS–SC, and WS–AV. The next section examines the theoretical implications of the findings of this study.

Theoretical Implications

The two main theories for this study are summarized and then theoretical implications are presented. This discussion is organized by research question. This study did not seek to create or test a new theory but rather examined WS with an understudied population using existing theories to explain relationships. The theoretical implications are then largely related to providing support for these theories among U.S. allied healthcare professionals. Broadly, these findings support the supposition that WS has positive benefits for employees and employers in the healthcare industry.

JET, developed by Mitchell et al. (2001), was a central theory that guided this study. This theory posits that on-the-job and off-the-job variables are strong predictors of retention and,

therefore, lower turnover. JET is a construct that identifies factors that may "embed" a person in their current job rather than quitting (Holtom & Darabi, 2018; Mitchell et al., 2001). Moreover, JET explains how employees interact with their jobs (Kiazad et al., 2015). According to JET, employees are more likely to be satisfied with their jobs when they feel a sense of connection to their jobs (Tabak & Hendy, 2016). For example, employees who experience a sense of community are more likely to be engaged. WS can create this sense of connection by fostering a sense of purpose in the workplace (Afsar & Rehman, 2015). Organizations that embrace WS have a higher level of employee satisfaction and engagement (Milliman et al., 2017). When employees are spiritually fulfilled, they are more likely to be engaged (Milliman et al., 2018).

The other theory that helped to form this study's primary theoretical framework was SET. SET is a psychological theory positing that social relationships are based on perceptions of trust, and any gesture of goodwill will be reciprocated (Blau, 1964). For example, when used to examine workplace relationships, SET theory asserts that employees who receive favorable treatment from their employer will respond positively to their jobs (Blau, 1964). Similarly, if an employee's behavior is met with disapproval, it is less likely to be repeated (Ahmad & Omar, 2014).

Research Question 1 Findings

Overall, WS was significantly, strongly, and negatively correlated with TI. TI was significantly and negatively correlated with the WS subscales. Regarding JET, the present study's findings align with this theory, and specifically its tenet that on-the-job and off-the-job variables are strong predictors of retention and, therefore, lower turnover. Regarding SET, the present study's findings support this theory. The theoretical tenet that employees who receive favorable treatment from their employer respond positively to their jobs is paired particularly

with the finding that WS–SC was significantly, moderately, and negatively correlated with TI. Having a sense of community as a specific component of WS may include having a positive connection with their employer, which decreases their desire to change jobs among allied healthcare professionals.

Research Question 2 Findings

Overall, WS was significantly, strongly, and positively correlated with JS. JS was also positively correlated with the WS subscales among these allied healthcare worker participants. Concerning JET, this second set of findings supports this theory, suggesting that organizations that embrace WS have a higher level of employee satisfaction (Milliman et al., 2017). Regarding SET, the findings support the theory that employees who receive favorable treatment or outcomes from their relationship with their employer will respond positively to their jobs.

Research Question 3 Findings

WS was significantly, positively, and moderately correlated with EE, as were the WS subscales. These findings indicate that employees are more likely to be satisfied with their jobs when they feel a sense of connection to their jobs (Tabak & Hendy, 2016). When employees are spiritually fulfilled, they are also more likely to be engaged (Milliman et al., 2018). These findings support this theory for allied healthcare professionals. Regarding the SET, the findings support this theory as social relationships are based on perceptions of trust and any gestures of goodwill will be reciprocated. When organizations encourage a sense of WS, actively through programs or passively, by not limiting employees' expression of WS, employees seem likely to respond favorably by focusing on their jobs.

Practical Implications

The findings from this study may suggest solutions for leaders, administrators, HR managers, and financial managers in healthcare organizations who are hiring, developing employees, engaging in organizational development, and working on retention strategies for allied healthcare professionals. Given that WS was negatively correlated with TI and positively correlated with JS and EE for this sample of allied healthcare professionals, this would suggest that organizations should include offering and facilitating opportunities to enhance WS.

Allied health organizations should be encouraged to start or bolster WS initiatives within the workplace and make them available to employees. According to Bhaskar and Mishra (2019), WS initiatives include practices that foster feelings of inclusiveness, belonging, joy, and support within the workplace. Additionally, WS initiatives can include practices that allow employees to express their spirituality and find higher meaning within their work (Bhaskar & Mishra, 2019).

WS initiatives have been implemented in other healthcare contexts and found to be successful in bolstering EE, reducing TI, and creating workplace cultures that promote JS (Bhaskar & Mishra, 2019; Iyer & Deshmukh, 2018; Jena & Pradhan, 2018; Milliman et al., 2018). Additionally, WS initiatives can encourage and strengthen connectedness among employees and improve organizational effectiveness (Celano et al., 2022). As WS in other healthcare contexts had led to a myriad of positive outcomes, it is implied that similar results would be noticed if implemented for allied health professionals.

For allied health organizations specifically, organizations should be encouraged to implement connectedness training and workshops where WS is encouraged. The literature is sparse on specific strategies to do this for allied health professionals specifically. However, strategies have been identified in previous research in other contexts. According to Allen and Fry

(2019), spirituality could be integrated into coaching or executive coaching efforts. Within that context, coaching would be focused on bolstering spiritual development in the workplace. Although Allen and Fry (2019) argued that adding spirituality development to executive coaching would be beneficial, they added that it is important to add spirituality into the workplace in a respectful manner and to ensure discrimination does not occur within the workplace. Similarly, Miller and Ngunjiri (2015) opined that workplace chaplains may improve organizational productivity by mitigating the costs associated with turnover, training, and increasing retention by addressing employees' spiritual needs. Finally, Tanyi (2002) looked at implementing spirituality practices in the workplace for nurses and found that spiritual care training may be beneficial in both patient care and improving provider–patient relationships, adding to the fulfillment of healthcare professionals. Additionally, quiet spaces for prayer and reflection may be utilized for religious and nonreligious spiritual employees to reflect on the higher meaning of their work. Yoga classes, meditation, and spiritual classes have been offered by large corporations such as IBM and Microsoft to nurture the practice of workplace spirituality (Gupta et al., 2014).

Additional changes, such as administering work–life balance programs, stress relief resources, and wellness programs for employees in healthcare organizations, can promote employee engagement. According to Saks (2006), employees will be more committed in their work when they are convinced by the efforts made by organizational leaders to implement programs that will help improve their workplace spirituality. Finally, leadership should be encouraged to foster cultures of joy and belonging to enhance EE, WS, and JS per the recommendations of Bhaskar and Mishra (2019).

Recommendations for Future Research

Multiple topics were noted in the literature review and discussion of findings where future research is needed. First, future research is recommended to include more studies of the relationship between WS and TI, JS, and EE within the healthcare sector and among allied healthcare professionals in the United States, as this study had a limited sample. Future research is also recommended to focus on the relationships between WS, leadership styles, organizational policies, and organizational culture in terms of how various factors can encourage WS. Studies were quite limited in the literature on the significance of demographic variables and how they interact with WS, TI, JS, and EE. Therefore, future research is recommended on these topics as well. Qualitative studies with interviews might allow further insight by exploring how WS impacts TI, JS, and EE, which may shed light on specific mechanisms through which WS is experienced and then influences perceptions of the dependent variables. Qualitative studies might also provide a richer perspective of how allied healthcare workers engage in sensemaking, finding purpose in their work, connecting with others around them in a spiritual community, and their experiences of alignment with the values of their organization. Additionally, qualitative researchers should explore how and why people find a spiritual workplace to contribute to their JS, EE, and TI, with a focus on understanding the mechanisms by which different WS experiences or actions by the organization connect to those outcomes.

Limitations

Limitations are drawbacks in a study that cannot be avoided but only mitigated (Yin, 2015). The first limitation of this study was that it relied on self-reported data. This limitation was unavoidable, given that the key variables for the study were subjectively experienced. Second, this study was limited by self-selection bias. As research ethics require that participation

be voluntary, there was no way to avoid self-selection bias in recruitment. The sample of participants may, therefore, differ from those who did not volunteer, resulting in the findings being different than if a truly representative sample were possible. This study may have also been limited by other types of bias, such as social desirability or researcher bias. These biases were mitigated by using well-validated, reliable survey instruments and a transparent data analysis process.

Another limitation of this study was the use of an online survey to gather data. While there are many benefits to utilizing this method in research, such as being able to collect data cost-effectively and quickly from large numbers of people in diverse areas or groups, online surveys can be limited because they depend on participants' understanding of the items (Nayak & Narayan, 2019). Additionally, it has been found that people respond similarly to questions, even of a sensitive nature, in electronic surveys (Nayak & Narayan, 2019). This study was also limited by a relatively small sample of 133 participants. However, a diverse sample of allied healthcare professionals was still found that included a mix of males and females, different races and ethnicities, different orientations to spirituality and religion, a spectrum of years of professional experience, specific types of professions, and geographic areas. Finally, I encountered some issues with responses that appeared to be from bots who had somehow joined the Facebook groups where the survey link was posted. While I thoroughly examined the data to identify and remove such data before the analysis, it is possible that a limited number of genuine participant data was removed or that a small amount of bot data was included in the analysis. This may slightly skew the sample. Additional studies are therefore needed to confirm the present study's findings.

Conclusions

The purpose of this quantitative correlational study was to examine the relationship between WS and three job outcomes of TI, JS, and EE among allied healthcare workers in the United States. The key finding from this study indicated that WS was associated with increased JS and EE and decreased TI among these allied healthcare professional participants, supporting previous indications in the literature that suggested such relationships might exist. The findings of this study provide potential solutions for leaders, administrators, HR managers, and financial managers in healthcare organizations to consider when hiring and developing employees, engaging organizational development, and working on retention strategies for allied healthcare professionals. It appears that fostering a sense of WS might yield positive outcomes for the employees and organization in an industry where retaining employees is essential to effective service delivery, fulfilling the purpose of healthcare organizations. However, further research is needed on the relationship between WS and TI, JS, and EE within the healthcare sector and among allied healthcare professionals in the United States to reinforce the findings of this study.

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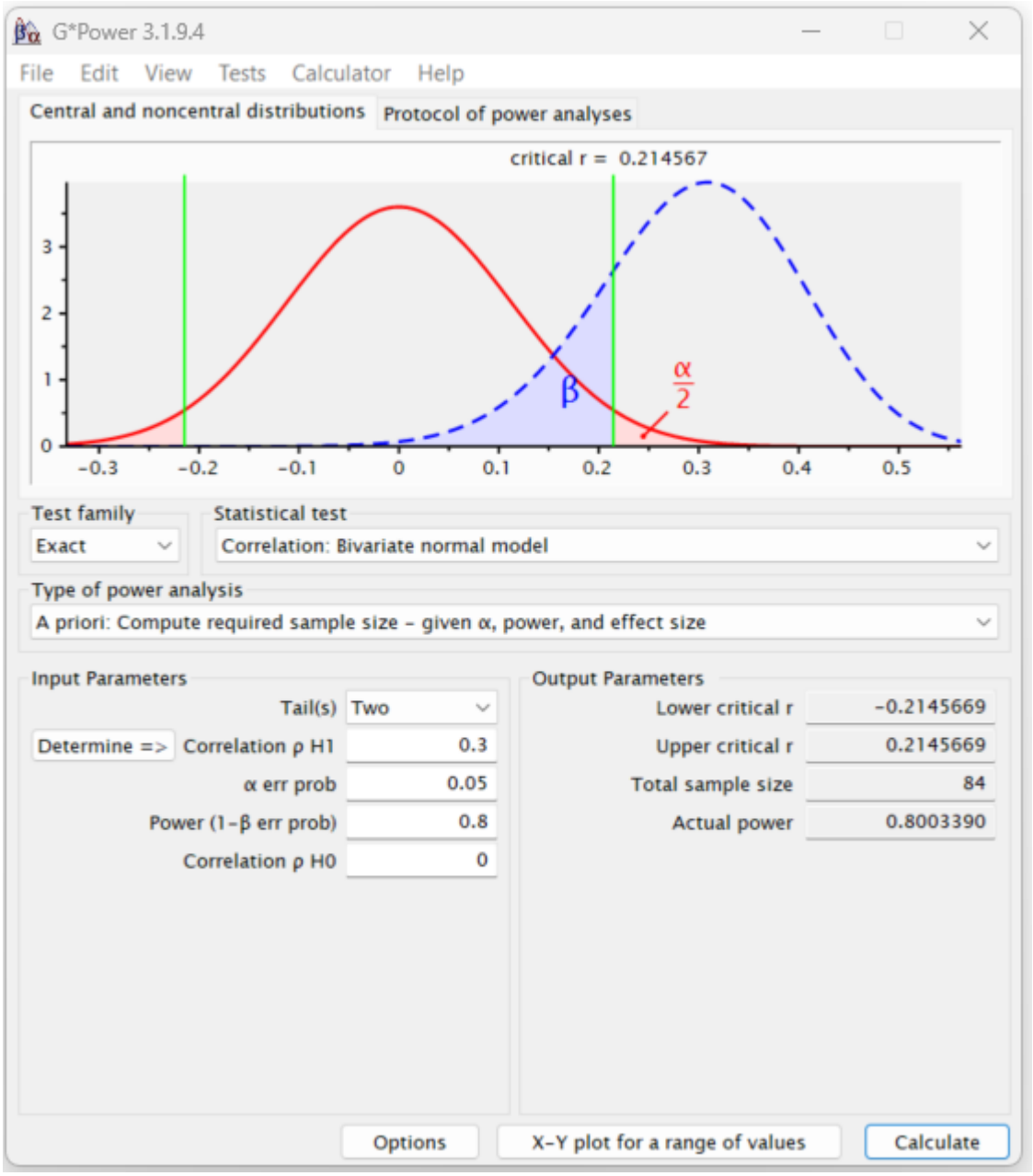
Appendix A: G*Power Sample Size



Appendix B: Recruitment Post

Dear Participant,

My name is Kerene Hoilett. I am a doctoral student in the EdD Organizational Leadership program at ACU. I am conducting a study to explore the impact workplace spirituality has on job attitudes among United States allied healthcare professionals. Participants must speak English, be 18 years or older, be United States residents, and be employed in the allied healthcare professions but are NOT nurses or doctors.

There is a prize draw for two $100 Amazon gift cards for participants. If you are willing to participate in the 10-minute online anonymous survey, please click the link below. After the survey, there will be a link to enter the prize draw separately to ensure your entry is not associated with your response to the main survey. Thank you very much for your time and participation.

Link: https://xxxxx.com

Appendix C: Informed Consent Form

Title of Study: Examining the Impact Workplace Spirituality Has on Job Attitudes of Allied Healthcare Professionals.

Invitation to Participate: If you are an allied healthcare professional/employee (other than a nurse or doctor) in the United States.

Procedure: This online survey should take about 10 minutes to complete. Your participation will be confidential and anonymous. No identifiable information will be stored as part of the main survey.

Risks and Benefits: Participating in this study presents no more than minimal risk to you and no more than what is experienced in daily life. Being in this study should not pose a risk to your safety or well-being. You will not be compensated for this study, and while this study will not benefit you directly, it will add to existing literature, and the benefits of your participation may impact how organizations and leaders can improve overall positive job outcomes for allied healthcare professionals.

Prize Draw: Drawing for one of two electronic $100 Amazon gift cards. I will then use random.org to choose the participants at random once all data has been collected. Participation in the draw is also voluntary.

Privacy: Reports coming out of this study will not share the identities of individual participants because the survey will be done anonymously. The researcher will not use your personal information for any purpose outside of this research project. Although social media will be used for recruitment in the present study, social media platforms will not have access to your answers. However, social media platforms could possibly track who clicks on the research link. Data will be kept secure by using a password-protected Qualtrics survey platform and computer

and keeping a flash drive containing backup data in a locked cabinet. Data will be kept for a period of at least 3 years, as required by the university.

Subject Rights: If I have any questions about this research study, you may contact the researcher, Kerene Hoilett, by email at xxxxx. You may also contact Dr. Stuart Allen by email at xxxxx. If I have concerns or general questions about my rights as a research participant, you may contact ACU's Chair of the Institutional Review Board and Executive Director of Research, Megan Roth, Ph.D. at xxxxx or by mail at: 320 Hardin Administration Bldg., ACU Box 29103 Abilene, TX 79699.

Conclusion: I have read and understand the informed consent, and by completing the surveys, I consent to participate in this research study. I understand that my participation in this study is completely voluntary and that I may withdraw at any time without any penalty.

If you wish to have a copy of this informed consent form, you may take a screenshot or print it. Please click on the button below if you voluntarily agree to participate in the study. Thank you for your time and participation.

o I AGREE

o I DECLINE

Appendix D: Full Survey

Examining the Job Attitudes of Allied Healthcare Professionals

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Start of Block: Block 5

Q52 **Examining the Job Attitudes of Allied Healthcare Professionals**

Q51 This study is being conducted by Kerene Hoilett, a healthcare professional for over 17 years, as a part of her doctoral dissertation in organizational leadership at Abilene Christian University. This study aims to examine the relationship between various job-related attitudes of allied healthcare professionals in the USA, who have not been studied as much as other healthcare professions. Participation is voluntary and anonymous and will take about 10 minutes.

End of Block: Block 5

Start of Block: Default Question Block

Q2 **Consent Form**

Please read this information carefully and ask any questions you may have before agreeing to participate in the study.

Invitation to Participate: You can participate in this study if you are an allied healthcare professional (other than a nurse or doctor), are 18 years old or older, and live in the United States.

Procedure: This online survey should take about 10 minutes to complete. Your participation will be confidential and anonymous. No identifiable information will be stored as part of this survey. Participants may not skip questions but may withdraw from the study by closing the survey. However, once you have answered the majority of questions (>50%), your data cannot be withdrawn from the study unless you request withdrawal in the final open-ended question, as the study is anonymous.

Risks and Benefits: Participating in this study presents no more than minimal risk to you and no more than what is experienced in daily life. Being in this study should not pose a risk to your safety or well-being. You will not be compensated for this study, and while this study will not benefit you directly, it will add to existing knowledge, which may help organizations and leaders to improve overall positive job outcomes for allied healthcare professionals.

Prize Draw: At the end of the survey, there is a link to a separate survey where you can submit your email address to enter into a drawing for one of two electronic $100 Amazon gift cards. This second survey asks for your email address so that your email address will not be linked to survey responses. Winners of the gift cards will be notified via email. Participation in the draw is

also voluntary.

Privacy: Reports coming from this study will not share the identities of individual participants or their employers because the survey will be anonymous. The results of the study will be reported in aggregate. The researcher will not use your email address for any purpose outside of the prize draw. Although social media will be used for recruitment in the present study, social media platforms will not have access to your answers. However, social media platforms could possibly track who clicks on the initial survey link. Data will be kept secure by using password-protected access to the Qualtrics survey platform and a password-protected personal computer, as well as a flash drive containing anonymous backup data in a locked cabinet. Data from the main survey will be kept for a period of at least 3 years, as required by the university. Your email address will only be stored with the second survey's findings in Qualtrics (password protected) and will be deleted from the survey site once the winners have claimed their prizes.

Participant Rights: If you have any questions about this research study, you may contact the researcher, Kerene Hoilett MPM, RDMS, by email at xxxx@acu.edu. You may also contact Dr. Stuart Allen, Ph.D. (dissertation advisor), by email at xxxx@acu.edu. If you have concerns about this study, believe you may have been injured because of this study, or have general questions about your rights as a research participant, you may contact the Abilene Christian University Institutional Review Board at (xxx) xxx-xxxx, xxxx@acu.edu, or through https://cdn01.acu.edu/community/offices/academic/orsp/contact.html or ACU's Chair of the Institutional Review Board and Executive Director of Research, Megan Roth, Ph.D. Dr. Roth may be reached at (xxx) xxx-xxxx, xxxx@acu.edu, 320 Hardin Administration Bldg., ACU Box 29103, Abilene, TX 79699

Q7 **Consent:** I have read and understood the informed consent, and by completing the surveys, I consent to participate in this research study. I understand that my participation in this study is completely voluntary and that I may withdraw at any time without any penalty. If you wish to have a copy of this informed consent form, you may take a screenshot or print it. Please click on the button below if you voluntarily agree to participate in the study. Thank you for your time and participation.

- ○ I AGREE (4)
- ○ I DECLINE (5)

Skip To: End of Survey If Consent: I have read and understood the informed consent and by completing the surveys, I consent... = I DECLINE

End of Block: Default Question Block

Q10 **Please read each statement carefully and decide if you ever feel this way about your job. Check the appropriate box, after each statement that best describes how frequently you feel that way.**

	0 Never (1)	1 Almost Never (4)	2 Rarely (5)	3 Sometimes (6)	4 Often (7)	5 Very Often (8)	6 Always (9)
At my work, I feel bursting with energy. (1)	○	○	○	○	○	○	○
At my job, I feel strong and vigorous. (2)	○	○	○	○	○	○	○
I am enthusiastic about my job. (3)	○	○	○	○	○	○	○
My job inspires me. (4)	○	○	○	○	○	○	○
When I get up in the morning, I feel like going to work. (5)	○	○	○	○	○	○	○
I feel happy when I am working intensely. (6)	○	○	○	○	○	○	○
I am proud of the work that I do. (7)	○	○	○	○	○	○	○
I am immersed in my work. (8)	○	○	○	○	○	○	○
I get carried away when I am working. (9)	○	○	○	○	○	○	○

Q55 Please select the option that best indicates your satisfaction level - 0 (totally dissatisfied) to 10 (totally satisfied)

Q20 All things considered, how satisfied are you with your job?

- ○ 0 (1)
- ○ 1 (2)
- ○ 2 (3)
- ○ 3 (4)
- ○ 4 (5)
- ○ 5 (6)
- ○ 6 (7)
- ○ 7 (8)
- ○ 8 (9)
- ○ 9 (10)
- ○ 10 (11)

End of Block: Block 1

Start of Block: Indicate your level of agreement with the following statements:

Q23 **Indicate your level of agreement with the following statements:**

	Strongly Disagree (1)	Disagree (2)	Slightly disagree (3)	Neither Agree nor Disagree (4)	Slightly Agree (5)	Agree (6)	Strongly Agree (7)
I often think of leaving the organization. (1)	○	○	○	○	○	○	○
It is very possible I will look for a new job next year. (2)	○	○	○	○	○	○	○
If I may choose again, I will choose to work for the current organization. (3)	○	○	○	○	○	○	○
My work is connected to what I think is important in life. (4)	○	○	○	○	○	○	○
I look forward to coming to work. (5)	○	○	○	○	○	○	○
I see a connection between work and social good. (6)	○	○	○	○	○	○	○
I understand what gives my work personal meaning. (7)	○	○	○	○	○	○	○
I feel part of a community. (8)	○	○	○	○	○	○	○

I believe people support each other. (9)	○	○	○	○	○	○	○
I think employees are linked with a common purpose. (10)	○	○	○	○	○	○	○
I believe employees genuinely care about each other. (11)	○	○	○	○	○	○	○
I feel positive about the values of the organization. (12)	○	○	○	○	○	○	○
My organization cares about all its employees. (13)	○	○	○	○	○	○	○
My organization has a conscience (a sense of right and wrong) (14)	○	○	○	○	○	○	○
I feel connected with the organization's goals. (15)	○	○	○	○	○	○	○

End of Block: Indicate your level of agreement with the following statements:

Start of Block: Demographic Information

Q38 **Demographic Information**
Q39 Age range:

- ○ 18–20 Years (1)
- ○ 21–30 Years (2)
- ○ 31–40 Years (3)
- ○ 41–50 Years (4)
- ○ 51–60 Years (5)
- ○ 61 Years and older (7)
- ○ Prefer not to answer (8)

Q40 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Other (4)
- ○ Prefer not to answer (5)

Q41 Ethnicity:

- ○ Hispanic (1)
- ○ White (2)
- ○ Black or African (3)

- American Indian and/or Alaska Native (4)
- Asian (5)
- Multiracial Non-Hispanic (6)
- Other (7)
- Prefer not to answer (8)

Q58 How would you describe yourself?

- Religious and spiritual (1)
- Religious but not spiritual (4)
- Spiritual but not religious (5)
- Not religious or spiritual (6)

Q43 Tenure in current role:

- ○ 0–1 year (1)
- ○ 2–5 years (2)
- ○ 6–10 years (3)
- ○ 11–15 years (4)
- ○ 16 or more years (5)
- ○ Prefer not to answer (6)

Q44 Years of work experience:

- ○ 0–1 year (1)
- ○ 2–5 years (2)
- ○ 6–10 years (3)
- ○ 11–15 years (4)
- ○ 16 or more years (5)
- ○ Prefer not to answer (6)

Q45 Job Profession

- ○ Phlebotomy technologist, EKG technologist (1)
- ○ Nursing assistant, nurse technologist (2)
- ○ Imaging technologist: X-ray technologist, ultrasound technologist, mammography technologist, CT technologist, MRI technologist, nuclear medicine technologist (3)
- ○ Respiratory therapists (4)
- ○ Medical technologists (5)
- ○ Physical therapists, occupational therapists (6)
- ○ Pharmacy technologist (7)
- ○ Medical assistants (8)
- ○ Other (9)
- ○ Prefer not to answer (10)

End of Block: Demographic Information

Start of Block: Block 5

Q56 Please confirm that you have finished answering the questions and agree to submit your response.

- ○ Yes (1)
- ○ No (2)

End of Block: Block 5

Appendix E: IRB Approval

Gmail [redacted]

IRB-2023-145 - Initial: Initial - Exempt – ACU

1 message

do-not-reply@cayuse.com <do-not-reply@cayuse.com> Fri, Jul 7, 2023 at 3:32 PM
To: [redacted]

Date: July 7, 2023

PI: Kerene Hoilett

Department: ONL-Online Student, 17250-EdD Online

Re: Initial - IRB-2023-145

Workplace Spirituality's Outcomes – A Study of Allied Healthcare Professionals in the USA

The Abilene Christian University Institutional Review Board has rendered the decision below for *Workplace Spirituality's Outcomes – A Study of Allied Healthcare Professionals in the USA*. The administrative check-in date is --.

Decision: Exempt

Category: Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

Research Notes:

Additional Approvals/Instructions:

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable. All approval letters and study documents are located within the Study Details in Cayuse IRB.

The following are all responsibilities of the Primary Investigator (PI). Violation of these responsibilities may result in suspension or termination of research by the Institutional Review Board. If the Primary Investigator is a student and fails to fulfil any of these responsibilities, the Faculty Advisor then becomes responsible for completing or upholding any and all of the following:

- When the research is completed, inform the Office of Research and Sponsored Programs. If your study is Exempt, Non-Research, or Non-Human Research, email orsp@acu.edu to indicate that the research has finished.
- According to ACU policy, research data must be stored on ACU campus (or electronically) for 3 years from inactivation of the study, in a manner that is secure but accessible should the IRB request access.
- It is the Investigator's responsibility to maintain a general environment of safety for all research participants and all members of the research team. All risks to physical, mental, and emotional well-being as well as any risks to confidentiality should be minimized.

For additional information on the policies and procedures above, please visit the IRB website
http://www.acu.edu/community/offices/academic/orsp...
or email orsp@acu.edu with your questions.