

PSYCHOLOGICAL WELL-BEING AND RELATED PERSONAL, SOCIAL, AND
WORKPLACE ENVIRONMENTAL FACTORS OF STAFF IN UNIVERSITY SETTINGS

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DEDICATION

I dedicate this dissertation work to my parents, William and Patricia Mopkins. Thank you for your continuous support and encouragement. Daddy, thank you for teaching me to be still and wait, for patience is a virtue. Mother, you have been my rock and my beacon, and I thank you for laying the foundation. Your influence has been a significant source of my determination to succeed.

I also dedicate this dissertation to my loving daughter, Lauren Reyes. You are my greatest blessing. Thank you for the happy moments during the most challenging times. Because of you, mommy was able to *Pursue Her Dreams*, and I will forever be grateful. I hope that I have made you proud.

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“For from Him and through Him and for Him are all things.

To Him be the glory forever! Amen.” ~ Romans 11:36

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ABSTRACT

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PSYCHOLOGICAL WELL-BEING AND RELATED PERSONAL, SOCIAL, AND WORKPLACE ENVIRONMENTAL FACTORS OF STAFF IN UNIVERSITY SETTINGS

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Assessing the extent of psychological well-being (PWB) of university staff and examining what factors have affected their PWB is a preliminary step to developing intervention programs that promote PWB and enhance productivity and worker engagement from the university perspective. The overall objectives of this dissertation were to clarify the workplace psychological distress concept and attributes related to PWB and to examine the level of PWB in current university staff and the relationships between their PWB and personal, social, and workplace environmental factors. This dissertation has been accomplished through studies resulting in two manuscripts.

For the first manuscript, a concept analysis was conducted to explain the intersection between the concept of workplace psychological distress (WPD) and personal, social, and workplace environmental factors of PWB. Strategies introduced by Walker and Avant's conceptual analysis method were utilized to conceptualize WPD and its impact on employees.

The second manuscript was based on an empirical study that adopted Ryff's (1989) PWB model, which addresses six domains of PWB: Autonomy, Environmental Mastery, Purpose in Life, Personal Growth, Positive Relationships, and Self-Acceptance, with the assumption that personal, social, and workplace environmental factors influence the PWB of university staff.

An 82-item PsychData survey containing four parts (i.e., demographics, Multidimensional Scale of Perceived Social Support, Work Factors Survey, Ryff's PWB Scale) was used to collect data for this study. Descriptive statistics were used to characterize the

personal, social, and workplace environmental factors of the study sample and determine the level of PWB of university staff. Pearson's correlational analysis was conducted to examine the relationships among the variables. Hierarchical multiple regression was performed to assess the impact of personal, social, and workplace environmental factors on the PWB of university staff.

This study provides helpful information for occupational health nurses (OHN) and other stakeholders (e.g., administrators, faculty, and staff) in university settings in assessing the level of PWB and related personal, social, and workplace environmental factors. Knowing the current PWB level and associated factors will enable OHNs and university administrators to devise strategies to promote the PWB of university staff.

Keywords: *Psychological well-being, University staff, Workplace environmental factor*

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CHAPTER I

INTRODUCTION

There are nearly four million workers employed by institutions of higher education or universities in the United States (Institute of Education Sciences, 2018). University staff performs information-intensive, administrative, and technical duties, having a significant influence on the campus community (Ogunbodede & Ambrose, 2020). University staff members are constantly interfaced by students seeking guidance for academic advisement, auxiliary services, and emotional support; their engagements directly impact student satisfaction and success (Guifoile & Krimpelbein, 2017). University employees are challenged by extensive organizational change, increased workload, and decreased governmental funding (Kaiser et al., 2021; Vandiya & Hidayat, 2018).

Recently, during the COVID-19 pandemic, approximately 80% of university employees reported higher levels of stress and feelings of anger as the result of increased job demands and the deterioration of work-life balance. Consequently, the mental health and psychological well-being (PWB) of university employees are impacted by the increase in job demands (Kaiser et al., 2021). The COVID-19 pandemic has caused universities to experience higher turnover rates of 35% (Umpierrez, 2021). Furthermore, over 60% of university staff were dissatisfied with the mental health support received from university administrators (Hall, 2021). Therefore, it is essential to provide programs or resources for mental health support for university staff. Assessing the extent of PWB of university staff and examining what factors have affected their PWB is a preliminary step to developing intervention programs to promote PWB and enhance productivity and worker engagement from the individual and university perspectives.

Problem Statement

High University Employee Turnover Rate, Job Stress, and Mental Health Issues

University employees face various teaching, research, and service pressures, including an increase in organizational growth and reshaping, research funding needs, and student enrollment, progress, and graduation (Kinman & Johnson, 2019). Employees in higher education are often exasperated by regular interactions with students, colleagues, and university administrators (Adewale et al., 2017). Studies reported that university staff also suffered from poor relationships with supervisors, career advancement limitations, and low job satisfaction leading to a high turnover rate (Figueroa, 2015).

The common turnover rate in university settings has been reported as approximately 14% for staff (Pritchard & Schmidt, 2020). Since the COVID-19 pandemic, nearly 60% of university employees have given serious consideration to a change in career or early retirement (Aimone, 2021). Indeed, the pandemic has caused universities to experience higher turnover rates of 35% (Umpierrez, 2021). Although there are various reasons for turnover in university employees, the COVID-19 pandemic has added dilemmas such as the fear of contracting a deadly virus, risk of job loss, challenges with childcare, and a rapid shift to online instruction (Melnik et al., 2021).

The number of university staff reporting feelings of anger, fatigue, and stress has more than doubled since the COVID-19 pandemic (Aimone, 2021). Over one-third of university employees have reported having a mental illness (e.g., depression, anxiety, and stress; Meeks et al., 2021). University staff who experience mental illnesses have been linked to an increased risk for developing physical health problems, such as high blood cholesterol and high blood pressure (Wright & Winslade, 2018).

Employee Psychological Well-Being

PWB is defined as “the combination of positive affective states such as happiness (the hedonic perspective) and functioning with optimal effectiveness in individual and social life (the eudaimonic perspective)” (Winefield et al., 2012, para. 2) while *mental health* involves “the absence of mental illness and the presence of psychological well-being” (Tang et al., 2019). High PWB is positively correlated with good mental health (Johal & Pooja, 2016). In this study, PWB refers to positive psychological functioning comprised of six domains (i.e., Autonomy, Environmental Mastery, Personal Growth, Positive Relationships with Others, Purpose in Life, and Self-Acceptance), as described by Ryff (1989). PWB is considered an ultimate life goal and the consolidation of one’s positive emotional state combined with the ability to function effectively (Iqbal & Khan, 2020; Winefield et al., 2012).

Employees who experience low PWB are at an increased risk for developing various chronic mental health conditions (e.g., anxiety and depression) and physical health disorders (e.g., health disease, diabetes, musculoskeletal disorders; Centers for Disease Control and Prevention [CDC], 2018). Multiple studies have discussed how employees’ PWB directly impacts employee satisfaction, mental health, and physical health (Chandrasekar, 2011; Coutinho et al., 2018; Kinman & Johnson, 2019; Mudrak et al., 2018; Rigotti et al., 2021; Robertson et al., 2012). Positive PWB has shown an increase in overall employee satisfaction and worker engagement (Coutinho et al., 2018; Mudrak et al., 2018; Rigotti et al., 2021) and is highly correlated with the individual’s job performance (Chandrasekar, 2011; Kinman & Johnson, 2019; Robertson et al., 2012).

Particularly in university settings, several studies reported university employees’ perspectives on PWB. Evanoff et al. (2020) reported the prevalence of anxiety, burnout,

depression, stress, work exhaustion, and decreased well-being among employees at a university and academic medical center during the COVID-19 pandemic. Perception of poor well-being by university employees was related to their experiences of increased stress levels due to job overload, lack of prospects, low levels of recognition, fluctuating roles, poor management, poor resources, increased time pressures, and student interactions; positive well-being was associated with a positive personality and coping (Williams et al., 2017). Ahmed et al. (2018) also hypothesized that the PWB of university employees could be associated with perceived stress and organizational justice, and promoting and preserving university employees' mental health and PWB would benefit the students and the university. Through the analysis of a large qualitative dataset about university staff and student well-being, Brewster et al. (2022) extracted several themes: (1) the intrinsic interrelationship and interconnection between staff and student well-being; (2) the importance of formal institutional policies in supporting or impeding staff and student well-being; (3) access to training interventions to support staff and student well-being as a practical manifestation of these policies; and (4) the impact of workplace culture and the centrality of compassion and community). This study emphasized that higher education institutions should respond proactively to staff and student well-being issues and foster a sustainable and effective academic environment.

Gaps in Previous Research on Employee PWB Assessments and Determinants

Employee PWB has been assessed in various aspects with different measurement tools, such as the Eudaimonic Workplace Well-Being Scale (EWWS; Czerw, 2019), the Interpersonal, Community, Occupational, Physical, Psychological, and Economic well-being (ICOPPE) Questionnaire (Prilleltensky et al., 2015), and the World Health Organization-Five Well-Being Index (WHO-5; Topp et al., 2015). The EWWS measures four aspects of PWB with 43 items:

(1) positive organization; (2) fit and development; (3) positive relations with co-workers; and (4) contribution to the organization (Czerw, 2019). The ICOPPE Scale includes 21 items used to measure seven factors of well-being (Interpersonal, Community, Occupational, Physical, Psychological, Economic, and overall) in three time periods: (1) past – a year ago; (2) present – now; and (3) future – a year from now (Prilleltensky et al., 2015). The WHO-5 assesses PWB with five items only: (1) I have felt cheerful in good spirits; (2) I have felt calm and relaxed; (3) I have felt active and vigorous; (4) I woke up feeling fresh and rested; and (5) My daily life has been filled with things that interest me (Topp et al., 2015).

Few studies have investigated the multiple dimensions of PWB in university staff using a comprehensive theoretical framework. Compared to such instruments, Ryff's (1989) PWB Scale assesses positive psychological functioning by operationalizing the six domains of PWB. The instrument has been used to investigate the variations of positive functioning among different age groups, genders, socioeconomic status, and cultures (Ryff & Singer, 1996). However, studies using Ryff's (1989) PWB perspective to measure the PWB of university employees have been rare, except for a study that compared the PWB of private and public university faculty (Akram, 2019), despite this model could comprehensively reflect the psychological experiences of university staff.

Research has reported that PWB is affected by personal, social, or workplace environmental factors. For example, some studies revealed that PWB varied by gender, age, race, and ethnicity. Matud et al. (2020) assessed the PWB of Spanish men and women using Ryff's (1989) PWB Scale; they found that men reported higher ratings in Autonomy and Self-Acceptance domains, while women reported higher ratings in Personal Growth and Positive

Relations with Others domains. This study concluded that PWB was pertinent to conformity to common gender roles, measured by the Bem Sex Role Inventory (BSRI; Bem, 1974). In Akram (2019), female faculty scored higher in developing Positive Relations with Others and Self-Acceptance domains in Ryff's (1989) PWB Scale. De-Juanas et al. (2020) found that the older group showed higher overall PWB from the assessment of the PWB of two age groups (aged 16-17 and 18-21). Chang et al.'s (2014) study with adult psychiatric patients in New England determined that the level of PWB varied by racial/ethnic differences; Asians reported the highest PWB, whereas Blacks had the lowest in response to the psychiatric treatment, using the 10-item Schwartz Outcome Scale (SOS-10). The researchers concluded that the other variables (e.g., poor physical health, socioeconomic status) might impact PWB and should also be considered.

Other studies have shown relationships between PWB and various social factors, including marital status, socioeconomic status, and lifestyle. Akram (2019) found that unmarried faculty scored higher on Purpose in Life and Personal Growth domains in Ryff's (1989) PWB Scale. Socioeconomic status (i.e., income, education, and occupation) was significantly correlated with Ryff's PWB scores (Navarro-Carrillo et al., 2020). Ozpolat et al. (2012) examined the impact of lifestyle on the PWB of Turkish university students using an adapted version of Ryff's (1989) PWB Scales. The researchers discovered that university students with a Control or Perfectionism lifestyle, as determined by Kern's (1982) Life Style Inventory, have a higher PWB than those with Need to Please, Self-esteem, or Expectations lifestyles.

Several risk factors within the workplace environment have also been considered determinants of poor PWB, including declining budgets, job insecurity, increased workloads, job demands, role stressors, poor management, unacceptable working conditions, and inadequate support from colleagues/supervisors (González-Rico, 2018; McMurtrie, 2020; WHO, 2020). The

association with the repetitive exposure to these workplace risk factors and low PWB has resulted in inadequate job performance and productivity, absenteeism, poor communication, work-family conflict, and somatic complaints (Akerboom & Maes, 2006; Carolan et al., 2017; CDC, 2018; Kersemaekers et al., 2018; Schütte et al., 2014; Winefield et al., 2014).

The PWB of university employees has become a substantial concern for academic administration after the COVID-19 pandemic, as universities experience increases in turnover rates and mental health issues of university employees, which can impact student learning and university operation. Unfortunately, the PWB status of this population has not been well-investigated (González-Rico et al., 2018). Minimal studies have used Ryff's (1989) PWB Scale to investigate the PWB of university staff. Further, less knowledge is available regarding the relationship between the level of PWB and the related personal, social, and workplace environmental factors for employees in a university setting.

Research Questions

This study aimed to describe the level of psychological well-being perceived by university staff and identify personal, social, and workplace environmental factors related to their psychological well-being. The specific research questions were:

1. What is the psychological well-being level of staff working in university settings?
2. What are personal factors related to the psychological well-being of staff in university settings?
3. What are social factors related to the psychological well-being of staff in university settings?
4. What are workplace environmental factors related to the psychological well-being of staff in university settings?

Significance of the Study

University administrators need to understand the impact of low PWB on both the individual employee and the institution. Low PWB of university employees directly affects their overall wellness (e.g., anxiety, stress) and impedes student well-being (e.g., decreased support) (Brewster et al., 2022; Williams et al., 2017). There is a significant need to promote the PWB of university employees to reduce the risk of developing chronic health diseases, improve the workforce's overall health function, and support student academic outcomes (Brewster et al., 2022). University administrators should develop policies and programs that promote employee engagement, reduce burnout, lower healthcare costs, and improve the PWB of university employees (Hill-Mey et al., 2015).

Recently, the number of universities adopting workplace well-being programs has grown to promote wellness and correct health-related problems of faculty, staff, and students (Brantley & Shomaker, 2021; Brewster et al., 2022; Travia et al., 2022). However, the programs have often experienced challenges related to organizational policies and culture that prioritize productivity and workload, in addition to the poor support of the inter-relationship between university staff and student wellbeing (Brantley & Shomaker, 2021; Brewster et al., 2022). To better design effective programs or resources that address the PWB of university staff, identifying factors that influence PWB is essential in protecting against mental and physical illnesses.

The findings of this study provide helpful information for occupational health nurses (OHN) and other stakeholders (e.g., administrators, faculty, and staff) in university settings in assessing the level of PWB and related personal, social, and workplace environmental factors. Additionally, OHNs could utilize the findings of this study to establish organizational policies and programs that mitigate any risk of preventable mental or physical disorders. This study also

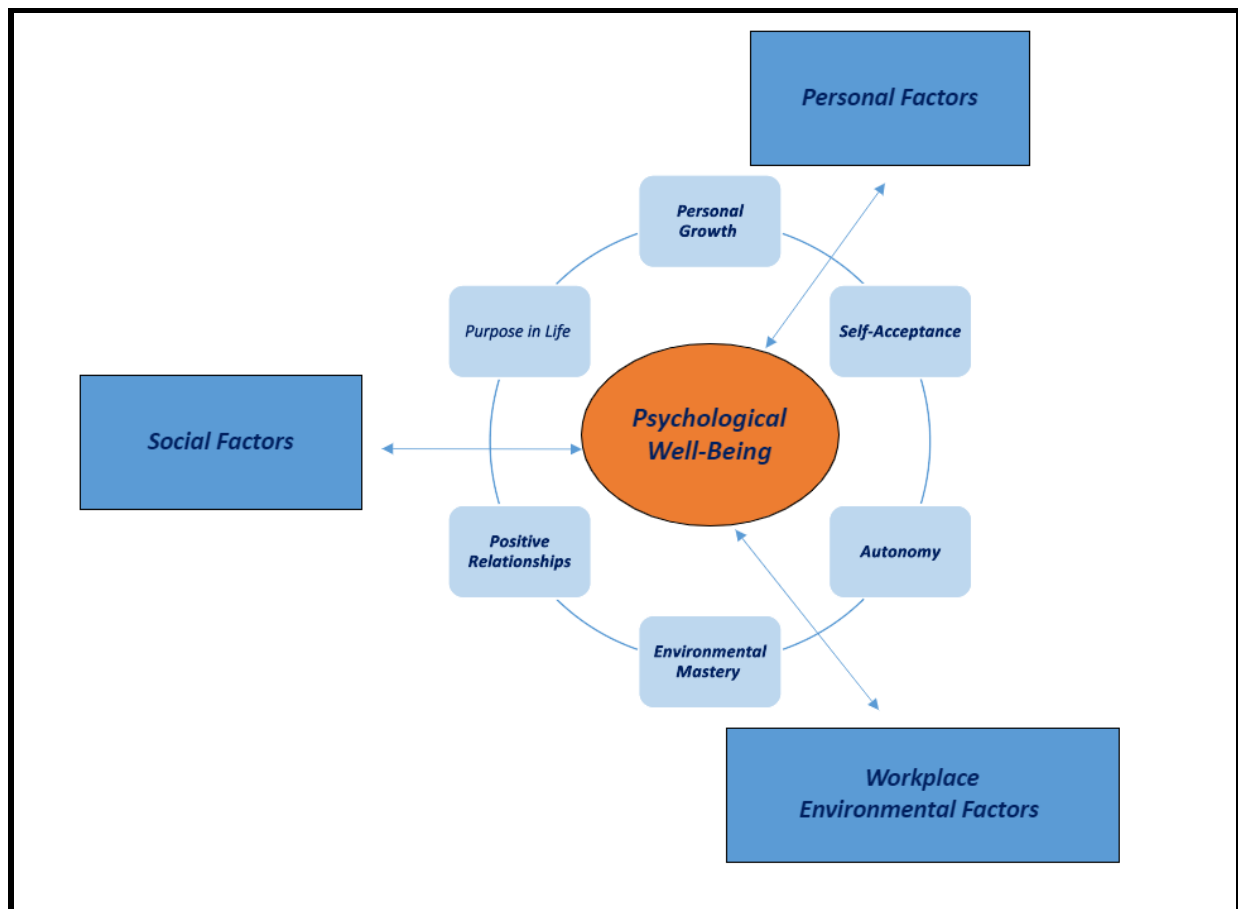
stimulates administrators to develop future pandemic response plans that consider not only the daily operations and the functions of the university but also the PWB of staff.

Conceptual Framework

The framework of this study adapted Ryff's (1989) PWB model (see Figure 1.1). Carol Ryff developed the model in 1989 to focus on positive functioning and the fundamental characteristics of well-being, such as Autonomy, Environmental Mastery, Personal Growth, Positive Relationships with Others, Purpose in Life, and Self-Acceptance (Ryff, 2014).

Figure 1.1

Conceptual Framework



According to Ryff (2014), PWB measured “whether they viewed themselves to be living in accord with their own personal convictions (*Autonomy*); how well they were managing their life situations (*Environmental Mastery*); the extent to which they were making use of their personal talents and potential (*Personal Growth*); the depth of connection they had in ties with significant others (*Positive Relationships*); the extent to which respondents felt their lives had meaning, purpose, and direction (*Purpose In Life*); and the knowledge and acceptance they had of themselves, including awareness of personal limitations (*Self-Acceptance*)” (p.11). The six domains of Ryff’s PWB are described in Table 1.1.

Table 1.1

Six Domains of Ryff’s Model of Psychological Well-Being

Domain	High Scorer	Low Scorer
Autonomy	Is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards	Is concerned about the expectations and evaluations of others; relies on judgments of others to make important decisions; conforms to social pressures to think and act in certain ways
Environmental Mastery	Has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values	Has difficulty managing everyday affairs; feels unable to change or improve surrounding contexts; is unaware of surrounding opportunities; lacks a sense of control over the external world

Domain	High Scorer	Low Scorer
Personal Growth	Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has the sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self-knowledge and effectiveness	Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has the sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self-knowledge and effectiveness
Positive Relations with Others	Has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands the give and take of human relationships	Has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships; not willing to make compromises to sustain important ties with others
Purpose in Life	Has goals in life and a sense of directedness; feels there is meaning to your present and past life; holds beliefs that give life purpose; has aims and objectives for living	Lacks a sense of meaning in life; has few goals or aims, lacks a sense of direction; does not see purpose of past life; has no outlook or beliefs that give life meaning
Self-Acceptance	Possesses a positive attitude toward self; acknowledges and accepts multiple aspects of yourself including both good and bad qualities; feels positive about past life	Feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; wishes to be different than what he or she is

Note. Definitions were retrieved from “Psychological well-being revisited: advances in the science and practice of eudaimonia” by Ryff (2014).

Ryff's (1989) PWB model is intended to assess the positive psychological functioning level of individuals and to understand the variations by examining the correlational impact of the six domains of PWB. The core of Figure 1.1 depicts that the interrelationship between the domains influences PWB. A person's level of PWB is classified as positive (high) or negative (low) but can be further classified as healthy, resilient, vulnerable, or unwell.

Assumptions

Studies have reported that individual PWB is affected by personal or social factors (Akram, 2019; Chang et al., 2014; De-Juanas et al., 2020; Matud et al., 2020; Navarro-Carrillo et al., 2020; Ozpolat et al., 2012), and employee PWB is further affected by workplace environmental factors (Akerboom & Maes, 2006; Carolan et al., 2017; González-Rico, 2018; Kersemaekers et al., 2018; McMurtrie, 2020; Schütte et al., 2014; Winefield et al., 2014; Yang et al., 2018). However, there are limited studies regarding the impact of these factors on the PWB of university staff. As depicted in Figure 1.1, this proposed study assumes that personal, social, and workplace environmental factors influence PWB in university staff based on the following literature review.

Relationship Between PWB and Personal Factors

PWB can be affected by various personal factors, such as age, gender, race, education level, or health status. Older ages are closely linked to lower PWB with three aspects: evaluative wellbeing (life satisfaction), hedonic wellbeing (feelings of happiness, sadness, etc.), and eudemonic wellbeing (sense of purpose and meaning in life; Steptoe et al., 2015). Male employees were commonly observed to have higher PWB than their female colleagues and were less likely to experience interruptions in their career paths due to life demands (i.e., maternity leave, and childcare; Mudrak et al., 2018). African-Americans consistently exposed to racial

stigmatization and threats showed lower PWB, no matter if discrimination is actual or perceived (Schmitt et al., 2014). Adults and elderly people with higher education levels showed higher PWB (Belo et al., 2020; Navarro-Carrillo et al., 2020). Poor health or chronic health conditions were associated with low PWB (Cho et al., 2011); contrarily, high levels of PWB introduced a protective feature of health by reducing the risk of illness and promoting human longevity (Ryff, 2014; Steptoe et al., 2015). In a study that investigated the PWB of employees at a university and academic medical center during the COVID-19 pandemic, the researchers determined the associated personal factors (e.g., age, sex, race, annual household income, and dependents aged under 18 years living at home; Evanoff et al., 2020). The researchers found that employees under 40 with reported composite stressors reported poorer PWB. O'Rourke (1986) investigated the relationship between the PWB of university-employed women and health, demographic, employment, and social factors and found that health, religious preference, and income were significantly related to PWB.

Relationship Between PWB and Social Factors

Some studies discovered a relationship between PWB and social factors, such as social support, marital status, and household composition (Adyani et al., 2019; Belo et al., 2020; Hsu & Barrett, 2020; Kim & Mitrani, 2019; Memon & Yusoff, 2022; Navarro-Carrillo et al., 2020; Perini & Sironi, 2016). Adyani et al. (2019) found a positive correlation between perceived social support and the PWB of university students. In the study, the researchers described social support as emotional and informational support from several sources (e.g., family, friends, and significant others) using the Multidimensional Scale of Perceived Social Support (MSPSS). Other studies showed married individuals had a higher PWB than individuals that were widowed, separated, or never married (Hsu & Barrett, 2020; Perini & Sironi, 2016). Kim and

Mitrani (2019) examined the impact of the household composition of Hispanic mothers and determined that those with no other adult in the home presented lower PWB. Memon and Yusoff (2022) also found a statistically significant association between perceptions of supervisors and co-worker support and the well-being of Pakistani university educators.

Relationship Between PWB and Workplace Environmental Factors

Multiple research findings have determined an association between employee PWB and the workplace environment (Akerboom & Maes, 2006; Chandrasekar, 2011; Mudrak et al., 2018; Schütte et al., 2014; Winefield et al., 2014; Yang et al., 2018). Workplace environmental factors that negatively impacted the PWB of healthcare employees included inadequate physical working conditions, such as temperature, ventilation, lighting, poor layout, and other physical work conditions (Akerboom & Maes, 2006; Chandrasekar, 2011). Using the Copenhagen Psychosocial Questionnaire II, Mudrak et al. (2018) investigated how job demands and resources influence the PWB of university faculty in the Czech Republic. Results of the study confirmed that job resources (e.g., job control, support from supervisor) and job demands (e.g., job insecurity, work-family conflicts) were significantly related to faculty well-being. Schütte et al.'s (2014) study with European employees found a significant association between poor PWB and negative work factors, including high job demands, low quality of leadership, and low sense of community. Winefield et al. (2014) identified that workplace factors positively impacting PWB of Australian university employees included improving job control and reducing job demands. In a study by Yang et al. (2018), the researchers discovered that the poor PWB of South Korean workers was associated with low-level job control, working greater than 53 hours per week, blue-collar work status, and low-level support at work.

In summary, studies have reported that individual PWB is affected by personal or social factors, and employee PWB is further affected by workplace environmental factors. However, there are limited studies regarding the impact of these factors on the PWB of university staff. Identifying personal, social, and workplace environmental factors significantly affecting the PWB of university staff is essential. Therefore, based on the literature review, this study included personal factors influencing university staff PWB, not limited to gender, age, race, ethnicity, education level, perceived physical health status, and perceived mental health status. The following social factors were measured by marital status, dependents in the home, and level of social support from family, friends, significant other, and supervisor, respectively. The workplace environmental factors included employment category, employment status, length of employment by the university, job control, psychological demands, and physical work demands. This study examined the relationships of these factors with PWB in university staff. The findings of this study will be useful in devising strategies to address factors significantly related to PWB of university staff. Figure 1.1 depicts the potential relationships between personal, social, and workplace environmental factors and an individual's PWB.

Definitions of Terms

The following conceptual definitions were used in the conduction of this study:

Psychological well-being

- **Conceptual definition:** The combination of positive affective states such as happiness (the hedonic perspective) and functioning with optimal effectiveness in individual and social life (the eudaimonic perspective; Winefield et al., 2012, para. 2).
- **Operational definition:** PWB refers to positive psychological functioning comprised of six domains (i.e., Environmental Mastery, Autonomy, Purpose in Life, Personal

Growth, Positive Relationships, and Self-Acceptance), as described by Ryff (1989).

PWB was measured using Ryff's (1989) PWB Scale, which is a 42-item questionnaire that measures such six domains.

Personal factors

- Conceptual definition: Personal factors are the particular background of an individual and can include childhood experience, knowledge and education, personality and self-construal, sense of control, values, political and world viewpoints, goals, responsibility, cognitive biases, place attachment, age, gender, and chosen activities, etc. (Gifford & Nilsson, 2014).
- Operational definition: Personal factors were measured by the following variables: gender, age, race, ethnicity, education level, perceived physical health status, and perceived mental health status.

Social factors

- Conceptual definition: Social factors refer to immediate social surroundings and socioeconomic circumstances that deeply influence the capacity for people to develop and flourish – including opportunities to engage positively with family members, friends, or colleagues and to earn a living for themselves and their families (Rieck & Lundin, 2021).
- Operational definition: Social factors were measured by the following items: marital status, dependents in the home, and level of social support from family, friends, significant other, and supervisor.

Workplace environmental factors

- Conceptual definition: Physical and psychosocial aspects of the job site that workers are routinely exposed to in performing their job duties (Workplace Testing, 2018).
- Operational definition: Workplace environmental factors were measured using employment category, employment status, length of employment by the university, and the Work Factors Survey (Hystad, 2011), which consists of the following subscales: job control, psychological demands, and physical work demands.

University staff

- University staff means all employees of the university other than faculty, instructional academic staff, persons whose employment is a necessary part of their training, student assistants, and student hourly help (University of Wisconsin System, n.d.).
- Operational definition: University staff were measured using the voluntary responses of study participants.

Limitations

There are several limitations or threats that may impact the overall results of this study. First, the study depends on the participants' voluntary responses. Fear of management retaliation may persuade employees to report higher PWB or refusal to respond. Therefore, protection of anonymity and confidentiality of the survey responses was informed to protect the participants.

In considering the external validity, there are two threats to contemplate: (1) the findings may not be transferable to a setting outside of the public university being studied, and (2) the sample may underrepresent the university staff population. Therefore, the generalizability of the findings can be weakened by restricting the outcome range. In addition, because this research study only investigated the PWB of employees at two public universities in the state of Texas, future research will need to include samples from multiple geographical university populations.

Summary

This research study aimed to describe the level of PWB in university staff and identify personal, social, and workplace environmental factors related to their PWB. Chapter 1 introduced increased university employee turnover rate, job stress, and mental health issues during the COVID-19 pandemic, which could be linked with their PWB. This chapter also brought the identified gaps in previous research on employee PWB assessments and determinants; 1) few studies have investigated the multiple dimensions of PWB in university staff using a comprehensive theoretical framework, and 2) previous studies have not comprehensively explored how PWB is influenced by personal, social, and workplace environmental factors.

Employees with low PWB are more likely to develop mental and physical disorders. High job demands, insufficient resources, and poor management of university staff have consistently been associated with increased adverse outcomes (i.e., stress, anxiety, depression, and other mental health difficulties; Brewster et al., 2021; Kaiser et al., 2021); which have been exacerbated by the impact of the COVID-19 pandemic (Riba et al., 2022; Umpierrez, 2021). Therefore, it is essential to provide programs or resources for mental health support for university staff. Assessing the extent of PWB of university staff and examining what factors have affected their PWB is a preliminary step to developing intervention programs to promote PWB and enhance productivity and worker engagement from the university perspective. This study adopted Ryff's (1989) PWB model, which addresses six domains of PWB: Autonomy, Environmental Mastery, Purpose in Life, Personal Growth, Positive Relationships, and Self-Acceptance, with the assumption that personal, social, and workplace environmental factors influence the PWB of university staff. Knowing the current PWB level and associated factors

will enable OHNs and university administrators to devise strategies to promote PWB of university staff.

CHAPTER II

WORKPLACE PSYCHOLOGICAL DISTRESS: A CONCEPT ANALYSIS

A Manuscript Accepted for Publication in the

Workplace Health & Safety Journal

Mopkins, D. (2022). Workplace psychological distress: A concept analysis, *Workplace Health & Safety Journal*, 70(10) pp. 436-444. Copyright © 2022 (Dawn Mopkins). DOI: 10.1177/21650799221090641.

This chapter includes a manuscript of a concept analysis of WPD published in the *Workplace Health & Safety* journal. While PWB is not exactly contrary to psychological distress, both are under mental health: a positive dimension corresponds to PWB, and psychological distress stands in a negative dimension (Franzen et al., 2021). However, some variables (i.e., marital status, work status, and education) positively correlated with PWB were negatively correlated with psychological distress (Winefield et al., 2012). Several workplace factors, such as job control, social support, and working conditions, have also been associated with psychological distress (Cadieux & Marchand, 2014; Vogazianos et al., 2019). Walker and Avant's 8-step framework for conceptual analysis was used to conceptualize WPD and its influence on employees. An extensive literature search was conducted, and 29 articles were thoroughly examined to define the concept of WPD.

Abstract

Background

Workplace psychological distress (WPD) significantly impacts employees' mental and physical well-being. However, WPD has not been well-defined in the literature as a concept. This concept analysis aims to clarify the concept of WPD and promote the use of the term in occupational health nursing research.

Methods

Strategies introduced by Walker and Avant's conceptual analysis method will be utilized to conceptualize WPD and its impact on employees. A literature search was conducted using Cumulative Index of Nursing and Allied Health Literature (CINAHL), Business Source Complete, and APA PsycArticles. The keyword search included the terms "workplace" AND "employee" AND "psychological distress."

Findings

Antecedents of WPD are increases in job demands, lack of control, low support, and workplace bullying. Defining attributes for WPD are extreme fatigue, role conflict, and time pressures. Consequences of WPD were mental disorders, physical disorders, and loss in productivity. This concept was further illustrated using a model, borderline, and contrary case.

Conclusion/Implications for Practice

Identifying signs of WPD is of great importance in caring for employees in the workplace. Occupational health nurses can use information obtained from a workplace assessment to develop policies, implement well-being programs, and provide employee referrals.

Keywords: *Workplace, Psychological Distress, Concept Analysis, Occupational Health Nursing*

Background

The primary responsibilities of occupational health nurses are health promotion, injury and illness prevention, and protection from workplace hazards (American Association of Occupational Health Nurses [AAOHN], 2021). Unfortunately, employees are susceptible to workplace psychological distress (WPD), which may negatively affect an employee's mental and physical well-being and ultimately impact an organization's operations (World Health Organization [WHO], 2021). More than 20% of employees will experience at least one episode of WPD (Firouzbakht et al., 2018; Marchand & Blanc, 2011), and all employees are at risk of exposure, directly or indirectly. Employees continuously experiencing WPD events may eventually develop preventable health conditions, such as cardiovascular disease or depression (Ghaddar et al., 2011). This paper intends to define the concept of WPD by using the Walker and Avant concept analysis approach to provide operational guidance for occupational health nurses and reduce the risk of employees experiencing WPD through related workplace policy development.

WPD is the result of combined elements that impact an employee's well-being (Health and Safety Executive [HSE], 2020) and are linked to an increase in psychological disorders, including stress, anxiety, and depression (Rigotti et al., 2021). Unanticipated disruptions in the work environment, such as the COVID-19 pandemic, directly impact the organization, policies, and employees (Fernandes & Pereira, 2016). In addition, WPD poses a threat to an employee's physical well-being (Machado et al., 2013; Salazar & Diego-Medrano, 2021; Schmidt et al., 2014). For example, studies have shown that WPD of computer users may lead to musculoskeletal discomfort related to posture and decreased muscle relaxation (Taylor, 2015).

Multiple aspects are associated with WPD, including workplace demands, social relations and leadership, workplace values, personality, worker–work interface, health and well-being, and offensive behavior. It is critical to identify which elements are found in the organizational environment that may have an influential impact on employee well-being (Coutinho et al., 2018). The failure of organizations to assess the prevalence of WPD among the employee population or the lack of appropriate intervention may present a significant financial impact to an organization, as evident by an increase in absenteeism, a decrease in productivity, and associated healthcare costs (Marchand & Blanc, 2011).

Methods

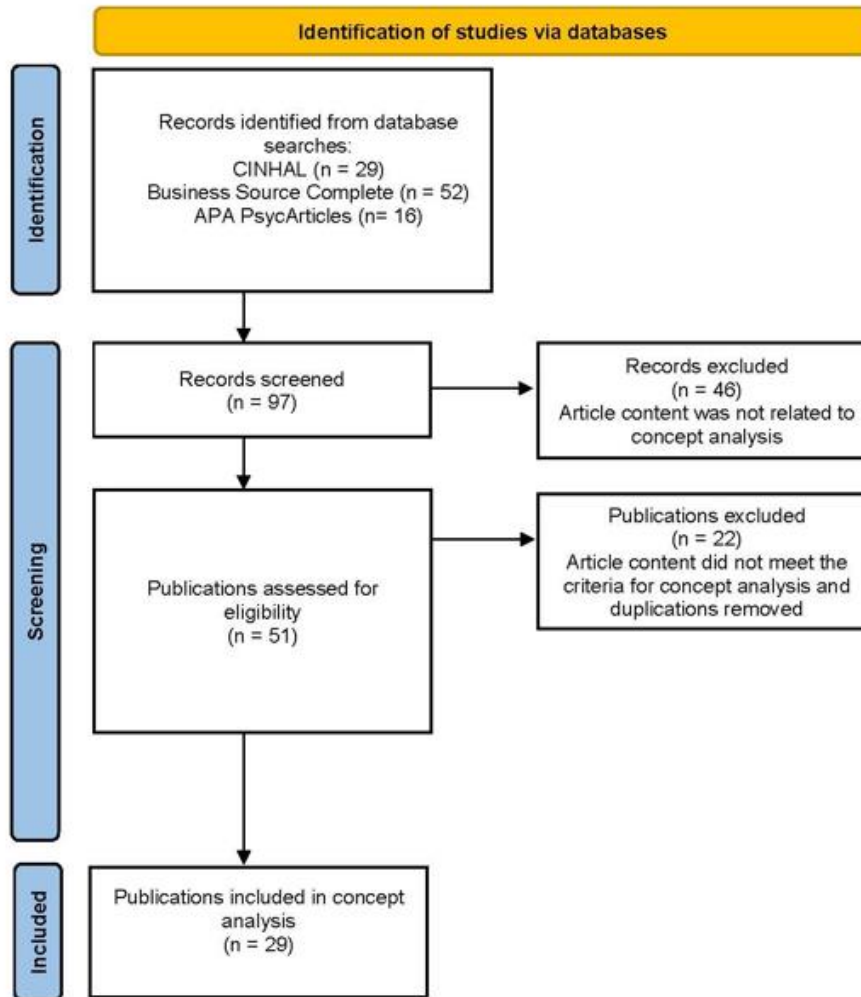
Walker and Avant’s approach was utilized in this WPD concept analysis. A concept analysis is a methodology used to examine a concept’s overall function and intends to formally present the defining attributes to promote a uniform understanding of a phenomenon (Walker & Avant, 2019). This concept analysis aims to clarify the concept of WPD and encourage the use of the term in occupational health nursing research. Walker and Avant’s approach helped identify all related applications of the WPD concept and determine the defining attributes, antecedents, and consequences. The process also included developing a model case, borderline case, and contrary case to explain the findings further. The final step included determining the empirical referents to measure the defining attributes.

As seen in Figure 2.1, a literature search was conducted using the databases Cumulative Index of Nursing and Allied Health Literature (CINAHL), Business Source Complete, and APA PsycArticles. The terms workplace AND employee AND psychological distress were included in the keyword search. Only peer-reviewed articles written in the past 10 years (2011–2021) in the English language were considered for this concept analysis. The literature search was also

limited to full text and all adult populations. The database search resulted in 29 articles found in CINAHL, 52 articles found in Business Source Complete, and 16 articles found in APA PsycArticles. Titles and abstracts were screened and determined to be relevant if a related discussion on WPD was considered applicable to employees in a workplace setting. A total of 46 articles were excluded. The remaining 51 articles were assessed for relevancy to the concept. Due to failure to meet the concept analysis criteria or duplication, 22 articles were removed. The remaining 29 articles were then considered for the development of this concept analysis.

Figure 2.1

PRISMA Diagram: Articles Related to Workplace Psychological Distress



Note. Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372(71). <https://doi.org/10.1136/bmj.n71>

Results

In determining the antecedents, defining attributes, and consequences of WPD, the 29 articles were analyzed. The information was then organized and recorded in Figure 2.2.

Figure 2.2

Summary of Antecedents, Attributes, and Consequences Related to Workplace Psychological Distress

References	Antecedents				Defining Attributes			Consequences		
	Job Demands	Lack of Control	Low Social Support	Workplace Bullying	Fatigue	Role Conflict	Time Pressures	Mental Disorders	Physical Disorders	Loss in Productivity
Anasori et al. (2020)				X	X					
Beattie et al. (2014)				X				X		X
Bowen et al. (2018)		X								
Chan et al. (2019)				X						X
Cloutier et al. (2018)			X							
Demerouti et al. (2013)	X		X							
Dextras-Gauthier & Marchand (2018)	X		X			X		X		
Elovainio et al. (2015)	X	X						X		X
Fernet et al. (2015)	X	X			X					X
Firouzbakht et al. (2018)			X					X		
Giorgi et al. (2015)	X	X		X				X		
Gnilka et al. (2017)	X				X					X
Hauke et al. (2011)									X	
Kyron et al. (2019)								X		
Lam et al. (2019)		X								
Machado et al. (2015)	X		X			X		X	X	
Marchand & Blanc (2011)			X					X		
Marchand et al. (2015)	X							X		
Moen et al. (2013)	X						X	X		
Moen et al. (2016)		X	X			X		X		X
Mohanty & Mohanty (2017)				X		X				X
Rabelo et al. (2019)				X				X		
Salazar & Diego-Medrano (2021)	X		X			X	X	X	X	
Schmidt et al. (2014)	X		X		X			X	X	
Schneider & Harknett (2019)	X	X				X	X	X		
Stansfeld et al. (2012)	X		X					X		
Turner et al. (2014)									X	
Velez et al. (2018)			X	X	X					X
Wang et al. (2016)			X							

Note. After conducting a database literature search, 29 related articles were used to identify the antecedents, defining attributes, and consequences of WPD.

Uses of the Concept

The phrase psychological distress is not an unfamiliar term and has been conceptualized in the literature as a patient's response to illness (Ridner, 2004). Unfortunately, the concept of WPD is not currently utilized in the literature, nor has the term been distinctly described. Although a specific understanding of how psychological distress impacts employees in the workplace has not been provided, Ridner (2004) provides the following operational definition of psychological distress to be considered as a means of clarification: "the unique discomforting, emotional state experienced by an individual [in the workplace] in response to a specific [work-related] stressor or demand that results in harm, either temporary or permanent, to the person" (p. 539).

Some related terminology of WPD that has been published includes Work-Related Psychological Distress and Psychological Distress in the Workforce. The term Work-Related Psychological Distress has been used to describe the state of employees' mental and physical wellness after being impacted by a stressful work environment, which is characterized by increased levels of non-specific negative emotional states (e.g., stress, anxiety, or depression) (Viertiö et al., 2021; Vogazianos et al., 2019). Furthermore, Cadieux and Marchand (2014) explain how Psychological Distress in the Workforce combines specific workplace, non-work-related, and family-related factors.

Other related terms found in the literature were:

- Psychosocial Hazards – Related to high job demands, low job control, high work pace, role conflict, inadequate levels of support, time pressures, job demands, and interpersonal relationships. These elements may impact job satisfaction and increase the risk of developing musculoskeletal disorders (Stone & Oakman, 2020).

- Psychosocial Working Conditions – Related to high-strain, low-strain, and passive jobs. Poor psychosocial working conditions have been linked to mental decline and chronic diseases (Pan et al., 2019).
- Psychosocial Work Environmental – Related to low job control and low social support. An unfavorable psychosocial work environment can cause anxiety, burnout, depression, and sleeping problems (Bláfoss et al., 2019; Sepp et al., 2019).

Defining Attributes

Walker and Avant (2019) suggested that defining attributes are central to any concept analysis. Based on the literature that was reviewed for this concept analysis, three defining attributes were regularly referenced in the illustration of WPD—Extreme Fatigue, Role Conflict, and Time Pressures.

Extreme Fatigue

The combination of irregular work with a demanding work environment may result in poor work outcomes, such as extreme fatigue (Velez et al., 2018). Signs of extreme fatigue may include difficulty concentrating and struggling to stay awake (Centers for Disease Control and Prevention [CDC], 2020). Extreme fatigue in the workplace is precipitated by the depletion of emotional resources and often results in increased tension and frustration, which has been linked to absenteeism and poor job performance (Gnilka et al., 2017). The terms burnout and emotional exhaustion are sometimes used interchangeably to describe extreme fatigue (Anasorei et al., 2020).

Role Conflict

A conflict between two or more role statuses often leads to psychological distress and is mainly observed between work and family obligations (Dextras-Gauthier & Marchand, 2018;

Role Conflict, 2021). The negative consequences of role conflicts may cause psychological distress, which has been associated with decreased productivity and employee engagement; however, role conflicts can be managed with adequate social support (Salazar & Diego-Medrano, 2021).

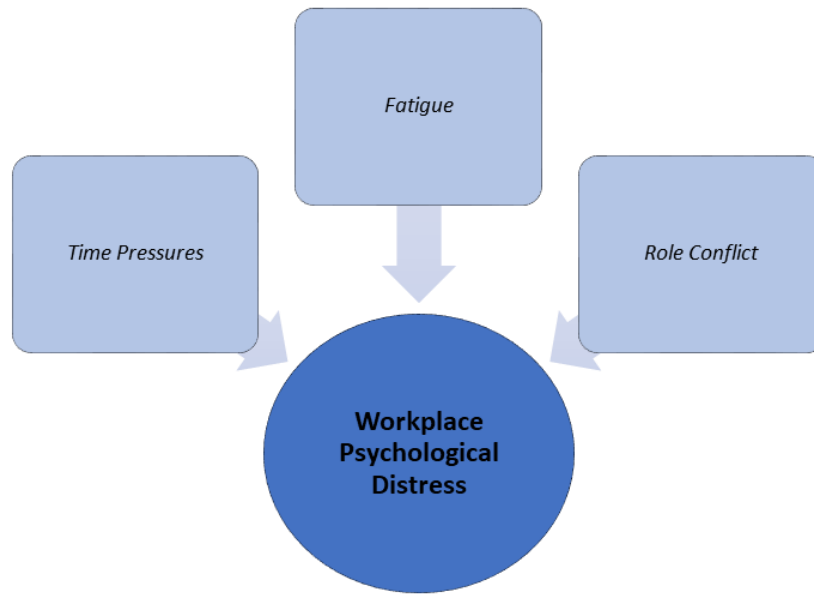
Time Pressures

Time pressures are considered daily stressors that increase with high job demands and lack of control (Schneider & Harknett, 2019; Tsiga et al., 2013). The literature suggests that time pressures may create feelings of employment uncertainty, and the health and well-being of employees is directly affected by the repetitive occurrence of time pressures (Schneider & Harknett, 2019).

Combining these three attributes (extreme fatigue, role conflict, and time pressures) defines WPD as a concept. Figure 2.3 presents how these three defining attributes are combined to produce the WPD concept.

Figure 2.3

Three Defining Attributes of Workplace Psychological Distress.



Note. Based on the literature that was reviewed for this concept analysis, there were three defining attributes that were regularly referenced in the illustration of WPD – *Extreme Fatigue*, *Role Conflict*, and *Time Pressures*.

Antecedents and Consequences

According to Walker and Avant (2019), antecedents are identified as the proceeding events of a concept. Common antecedents linked to WPD are the increase in job demands, lack of control, low social support, and workplace bullying (Chan et al., 2019; Jain et al., 2012; Janssens et al., 2016; Moen et al., 2013; Mohanty & Mohanty, 2017; Ropponen et al., 2020; Soares et al., 2012).

Job Demand

The literature recognizes an assortment of job demands traits, including mental overload, interpersonal conflicts, task completion restrictions, and organizational constraints (Fernet et al., 2015; Janssens et al., 2016; Marchand et al., 2015). The psychological distress caused by high job demands has been associated with decreased well-being and cardiovascular disease (Stansfeld et al., 2012).

Job Control

The characteristics of job control include employees' skill level and ability to determine work activities (Janssens et al., 2016). The lack of job control has been linked to increased reports of fatigue, distress, and poor physical and mental health (Bowen et al., 2018; Elovamio et al., 2015; Lam et al., 2019; Moen et al., 2013).

Social Support

The characteristics of social support include the support of supervisors and coworkers (Janssens et al., 2016). The literature suggests that a lack of social support can negatively impact employees by subjecting them to low self-esteem, low sense of organizational fit, and eventually, burnout (Cloutier et al., 2018; Demerouti et al., 2013; Li et al., 2016; Velez et al., 2018). Furthermore, low social support has been identified as a constant cause of mental disorders, including depression, for employees in the workplace (Stansfeld et al., 2012).

Workplace Bullying

An assortment of studies has described workplace bullying as repeated unreasonable or unwanted behavior toward an employee or an employee group that poses a significant threat to the mental and physical health of the person or persons being targeted (Beattie & Griffin, 2014; Chan et al., 2019; Mohanty & Mohanty, 2017). Workplace bullying has also been identified as

an agent for emotional exhaustion or extreme fatigue, decreased resilience, and, therefore, a significant predictor of psychological distress (Anasorei et al., 2020; Giorgi et al., 2015; Rabelo et al., 2019).

On the other hand, consequences are the outcomes following the concept occurrence (Walker & Avant, 2019). Prevalent consequences associated with WPD are mental disorders, physical disorders, and loss in productivity (Coutinho et al., 2018; Kouvonen et al., 2016; Pan et al., 2019; Pope-Ford & Pope-Ozimba, 2020; Soares et al., 2012).

Mental Disorders

The literature thoroughly documents how long-term exposure to factors such as an increase in job demands, lack of control, low support, and workplace bullying may impact the overall health of an employee, which may develop into chronic mental disorders such as depression and anxiety, and stress (Kouvonen et al., 2016; Moen et al., 2016; Pan et al., 2019).

Physical Disorders

WPD may also subject employees to the development of physical disorders by predisposing them to the injury of multiple body parts, including the lower back, neck, shoulder, elbow, hands, and wrists (Pope-Ford & Pope-Ozimba, 2020; Turner et al., 2014). These ailments are related to several factors, including increased muscle tension, varying joint movements, and disrupted blood flow (Hauke et al., 2011; Soares et al., 2012).

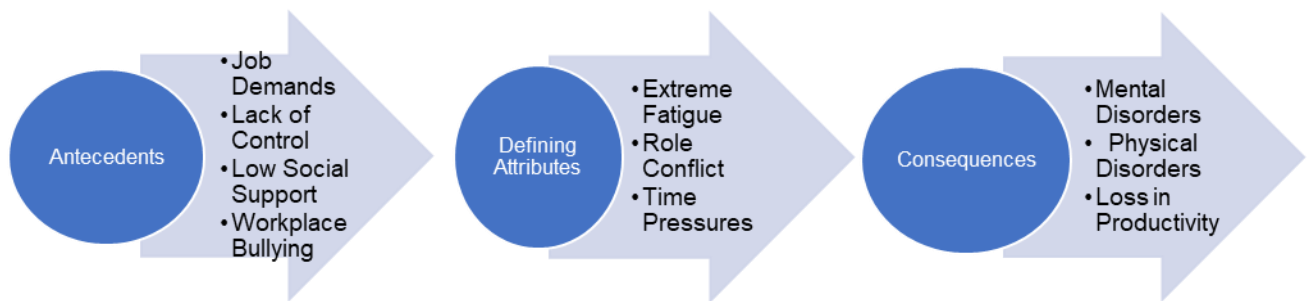
Loss in Productivity

WPD that results in the development of mental disorders and physical disorders directly impacts organizational productivity and the organization's overall bottom line, as often observed in increased costs related to injury and increased absenteeism (Coutinho et al., 2018). Furthermore, the effects of WPD can also lower the performance of employees present in the

workplace, also referred to as presenteeism, which is estimated to be 5 to 10 times more costly than absenteeism (Evans-Lacko & Knapp, 2016). Figure 2.4 presents the direct relationship between the Antecedents, Defining Attributes, and Consequences of WPD.

Figure 2.4

Antecedents, Defining Attributes, and Consequences of Workplace Psychological Distress.



Example Cases

Three example cases (Model, Borderline, and Contrary) were developed to demonstrate the impact of WPD on the employee. According to Walker and Avant (2019), the Model case should include all defining attributes identified in the concept analysis. A Borderline case will contain most, but not all, of the defining attributes, whereas the Contrary case will not present any of the defining attributes. The presentation of these cases will provide further clarity on the antecedents, defining attributes, and consequences of this concept analysis.

Model Case

Alberta, a recent graduate of University X, is employed by Organization Y. Shortly after being hired, several of Alberta's coworkers were laid off because of the economic impact related to the COVID-19 pandemic. The immediate restructuring of the department staff was required.

Consequently, Alberta was directed by her manager to increase her workload significantly. All believed that the COVID-19 pandemic would be short-lived; however, 8 months have passed, and Alberta's working conditions remain unchanged. Her job demands have increased significantly. With so many deadlines, she has no control over her work speed and must now work an average of 60 hours per week to keep up. Jim, Alberta's colleague, is beginning to complain about her work performance and has been heard making comments like: "This is why we shouldn't hire women to do a man's job."

Alberta has attempted to voice her complaints to her manager during their one-on-one meeting. Unfortunately, he is focused only on the staffing shortages and does not provide any additional support or resources to help improve her current working conditions. Alberta begins to struggle at work and is unable to meet essential deadlines. The constant exposure to occupational stress has become unbearable. She has already started to experience panic attacks and calls in sick for work an average of once per week due to exhaustion. After several weeks of intermittent absences, Alberta was informed by her manager and human resources that she must submit completed Family and Medical Leave Act (FMLA) paperwork before returning to work or risk termination from Organization Y. As instructed, Alberta met with her primary care physician. She was diagnosed with anxiety and major depressive disorder.

All three defining attributes of WPD (extreme fatigue, role conflict, and time pressures) were presented in this model case. The restructuring of staffing led to Alberta experiencing role conflict. The work deadlines resulted in added time pressures. She complained of extreme fatigue, which eventually led to increased absences. Furthermore, Alberta was subjected to workplace bullying by her colleague. As a result, Alberta experienced significant occupational stress and was later diagnosed with anxiety and depression.

Borderline Case

Charlie is a machine operator for Company O&G. One of Charlie's colleagues recently went out on sick leave and is expected to remain off work for an extended period. Consequently, management has required all operators on Charlie's rotation to work overtime. Fortunately, Charlie can always complete his work assignments during his work shifts and has not experienced any time pressures related to increasing job demands. Charlie is also a husband and the father of a 5-month-old baby girl. He appreciates the opportunity to gain extra income by working overtime; however, Charlie is now mandated to work the night shift and is unable to spend quality time with his wife and newborn daughter.

Two attributes of WPD (extreme fatigue and role conflict) are presented in this borderline case. Charlie's coworker going out on sick leave led to increased job demands, which resulted in extreme fatigue due to the required overtime. Also, Charlie was forced to work the night shift, and his inability to spend sufficient time with his family has resulted in role conflict between work and home. The time pressures defining attribute was not evident in this case, and therefore, this example is considered a borderline case.

Contrary Case

New owners recently purchased company Z, and the existing employees are preoccupied with adjusting to the work environment. To evaluate employees' response to the recent organizational changes, management has requested that the occupational health nurses conduct a psychosocial assessment of the entire staff. After reviewing the collected data from a voluntary survey, the occupational health nurses informed management that many employees were at risk of developing WPD due to high job demands, lack of control, and the perception of low social support. The occupational health nurses suggested that immediate action be taken to mitigate the

occurrence of undesired consequences. Management and human resources promptly announced that additional staffing would be onboarded to reduce the current job demands. In addition, employees will now be offered flexible work scheduling, including remote work from home.

Although the occupational health nurses' initial findings revealed that the employees were exposed to antecedents of WPD (high job demands, lack of control, and the perception of low social support), management quickly intervened by improving the work environment. In addition, management showed support by hiring additional staff to reduce job demands, and they supplied the employees with control of their work schedules. This contrary case does not present any of the defining attributes of WPD (extreme fatigue, role conflict, and time pressures).

Empirical Referents

The final step of this concept analysis was to determine the empirical referents. According to Walker and Avant (2019), this step is necessary to measure the defining attributes of the concept analysis. WPD can be measured by using a reliable and valid tool. The Copenhagen Psychosocial Questionnaire (COPSOQ-II) was initially developed to assess the psychosocial work environment (National Research Centre for Safety and Health at Work [NRCSHW], n.d.). There are three different versions of the COPSOQ-II available: small, medium, and large. The medium questionnaire was determined to be sufficient in addressing the elements of this concept analysis.

The medium COPSOQ-II is a self-reporting questionnaire that consists of 87 questions that have been divided into 28 dimensions assessing the perceived psychosocial work environment of employees (NRCSHW, n.d.). Several questions on the COPSOQ-II are related to the elements of this concept analysis, including role conflicts, social support from supervisors and colleagues, work pace, cognitive demands, and workplace bullying. Most of the questions

are structured using two different 5-point Likert-type scales. One response scale ranges from *Always, Often, Sometimes, Seldom, Never/Hardly Ever*, and the other response scale ranges from *To a very large extent, To a large extent, Somewhat, To a small extent, and To a very small extent*. Overall, the medium COPSOQ-II has demonstrated internal consistency reliability with high Cronbach alpha ratings measuring above 0.7 for most dimensions (NRCSHW, n.d.). Information obtained from the COPSOQ-II can be used to provide employee referrals when needed, implement programs focused on psychological well-being, and develop workplace policies that focus on the health and safety of employees.

Implications for Occupational Health Nursing Practice

As part of their traditional roles and responsibilities, occupational health nurses identify, monitor, and evaluate workplace hazards (AAOHN, 2021). To promote the well-being of employees in the workplace and reduce the risk of WPD, occupational health nurses will also need to assess the impact of specific factors (personal, social, and environmental factors) on the overall well-being of employees (Kyron et al., 2019). With the data collected from a WPD assessment, the occupational health nurse can assist the organization with developing programs that may improve the overall internal workplace environment (Fernandes & Pereira, 2016). Future considerations should also include the induction of organizational health policies structured to reduce the manifestation of WPD (Jain et al., 2012).

Conclusion

This concept analysis demonstrated that employee exposure to WPD may result in mental or physical disorders (Fernandes & Pereira, 2016). Unfortunately, the available literature provided varying interpretations regarding the essential elements of the concept, and no dependable definition of WPD exists. This conceptualization of WPD offered a foundational

understanding for occupational health nurses and employers by identifying the defining attributes, antecedents, and consequences (see Figure 2.4). In addition, example cases were provided to illustrate employees' risk for developing WPD. Furthermore, the medium COPSOQ-II measurement tool should be considered for use in the future assessment of WPD exposure. Whether or not employees disclose their experience of extreme fatigue, role conflict, or time pressures, employers' burden is on employers to mitigate the risks of these incidents by promoting a workplace environment focused on total worker well-being and employee satisfaction.

In Summary

- WPD is a potential threat to employee health and the organization's overall bottom line.
- Psychological distress is not an unfamiliar term and has been conceptualized in the literature, unfortunately, a specific understanding of how psychological distress impacts employees in the workplace has not been provided.
- Occupational health nurses will need to assist with the development of workplace programs and policies that promote employee well-being.

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CHAPTER III

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

This empirical study aimed to describe the level of PWB perceived by university staff and identify personal, social, and workplace environmental factors related to their PWB. This chapter presents the study design, setting, sample description, protection of human subjects, instruments, data collection procedure, and data analysis.

Study Design

This study used a cross-sectional, descriptive correlational study design to explore the levels of PWB among university staff and examine influential factors to their PWB through a self-report survey questionnaire. A cross-sectional design refers to a study design that collects data at one point in time for describing a population and variables (Polit & Beck, 2021). Descriptive correlational research is a non-experimental type of quantitative research to systematically observe, describe, and document relationships between variables without manipulation (Polit & Beck, 2021). A cross-sectional, descriptive correlational research design is suitable for this study as this study will collect the perceived PWB of university staff at a single time to describe the relationships among PWB and study variables. This study design addressed the following research questions:

- (1) What is the psychological well-being level of staff working in university settings?
- (2) What are personal factors related to the psychological well-being of staff in university settings?
- (3) What are social factors related to the psychological well-being of staff in university settings?

- (4) What are workplace environmental factors related to the psychological well-being of staff in university settings?

Setting

Study participants were recruited from two universities in the State of Texas. Texas Woman's University (TWU) is a public university system with campuses in Dallas, Denton, and Houston. TWU currently serves over 16,000 students and offers several degree programs, including business, education, health sciences, liberal arts and sciences, and nursing (TWU, 2022a). The total number of full-time and part-time employees at TWU is approximately 2,134, including 1,682 staff (National Center for Education Statistics [NCES], 2020).

The University of Houston (UH) System comprises four separate institutions: UH, UH-Clear Lake, UH-Downtown, and UH-Victoria (UH System, 2022). UH is a Carnegie Foundation Tier One research institution recognized for its high research activity (UH, 2022a). The UH campus is centrally located in Houston, and there are two additional instructional sites (e.g., Katy and Sugar Land). UH currently serves over 47,000 students and offers a multitude of undergraduate, graduate, and doctoral degree programs in 16 academic areas. The total number of full-time and part-time employees at UH is approximately 7,113, including 5,520 staff (NCES, 2020). This study will recruit participants from the TWU and UH campuses only.

Population and Sample

A convenience sample of university staff participants from TWU and UH campuses was used for this study. Convenience sampling is a non-probability sampling technique that allows the researcher to recruit the most readily available participants (Polit & Beck, 2021). The inclusion criteria were as follows: the university staff should be 1) regular full-time staff working in a normal schedule of 40 hours per week; or part-time staff working in a normal schedule of at

least 20 but less than 40 hours per week for a minimum of 4.5 continuous months (TWU, 2022b; UH, 2022b) and 2) aged 18 years and older. The exclusion criteria were non-regular employees not eligible for benefits, faculty, instructional academic staff, student employees, or temporary employees (i.e., camp assistants, lab assistants, mentors, and program assistants).

A priori power analysis was conducted using G*Power 3.1.9.7 to determine the minimum sample size required to find statistical significance in multiple regression analysis. A commonly accepted level of power (β) is .80, which indicates that there is a 20% chance of Type II (false negative) error (Pallant, 2016). To reduce the chance of Type I (false positive) error, the alpha (α) level is set at .05 because most previous studies examining PWB used the same criterion to determine the significance of the findings. Cohen's d is used to determine the required sample size for a regression model; conventional criteria for effect size (f^2) are: small ($f^2 = .02$), medium ($f^2 = .15$), and large ($f^2 = .35$ or greater; Geert van den Berg, n.d.). A small-medium effect size is a conservative and reasonable assumption to make for any power analysis. Thus, using the desired level of $\beta = .80$, $\alpha = .05$, and $f^2 = .10$, a minimum of 159 participants is required to ensure adequate power.

Protection of Human Subjects

This dissertation study obtained approval from TWU and UH Institutional Review Boards (IRBs). Both institutions approved the researcher's pilot study related to this dissertation study (see Appendices A and B). Thus, this dissertation study went through an IRB amendment process. All participants received a research information statement that fully discloses details of the study and confirms that study participation is voluntary. In addition, the participants were asked to provide consent on the front page of the survey before proceeding with questionnaire responses. The data was collected securely through a PsychData electronic survey. Participants

were allowed to complete the survey at any convenient time or place. All data were collected through the PsychData survey and stored securely on its server. The research data collected were aggregated and analyzed in groups. All personally identifiable data included in the responses remained confidential. All data were deidentified and disseminated through professional seminars, publications, and other engagement opportunities with university stakeholders. After the study results are published, the study data will be erased/destroyed.

Risks of Participation

Participation in this study involves two potential risks: (1) loss of confidentiality and (2) loss of anonymity. The following strategies were taken to minimize these risks.

Loss of Confidentiality

There is a potential risk of loss of confidentiality in all email, downloading, meetings, and internet transactions. To reduce the risk, the Blind Carbon Copy (BCC) field was used when sending emails to TWU and UH staff. Confidentiality was protected to the extent that is allowed by law. All personally identifiable information remained confidential and was stored in an encrypted, password-protected file separately from the research study data. The researcher ensured the security of all the research data collected from this study by saving the data in the researcher's password-protected database. When the results of the research are published or discussed at conferences, no identifiable information will be used.

Loss of Anonymity

There is a potential risk of a loss of anonymity. The participant's name and email address were requested to be entered into the grand prize drawing at the completion of the study. The participants' names and contact information were not attached to any survey data provided by the participant. All survey data were labeled and identified with a unique participant number only.

Benefits of Participation

At the completion of the questionnaire, the participants were informed that they would have the opportunity to complete a separate incentive entry survey to voluntarily enter a grand prize drawing for a \$50 Amazon gift card. The incentive entry survey requested personally identifiable information, including name and email address.

Instruments

An online self-report survey was created using PsychData. The survey consisted of four parts with 82 questions in total, including the demographic questionnaire, the Multidimensional Scale of Perceived Social Support (MSPSS), the Work Factors Survey (WFS), and Ryff's PWB Scale (see Appendix C for full online survey). The time to complete the survey ranged from 5 to 22 minutes.

Demographic Questionnaire

The demographics questionnaire included 16 items to capture some information on personal, social, and workplace environmental factors. Personal factors considered in this study were gender, age, race, ethnicity, education level, perceived health status, and comorbidities. Social factors included marital status, dependents in the home, and perceived social support. Workplace environmental factor included employment location, employment category, employment status, length of employment by the university, leadership position, job control, psychological demands, and physical work demands.

Gender

Indicators of gender included these items: Male, Female, Transgender, and Non-Binary/Non-Conforming.

Age

Age in years was self-reported by the participants.

Race

Indicators of race included these options: American Indian or Alaskan Native, Asian, Black or African-American, Native Hawaiian or Other Pacific Islander, White, and Other.

Ethnicity

Ethnicity was identified by two indicators: Hispanic or Non-Hispanic.

Perceived Health Status

Perceived health status refers to a subjective reflection of physical and mental health status (Wu et al., 2013). It was measured by the Self-Rated Health (SRH) tool with two items, “*In general, would you say your physical health is poor, fair, good, very good, or excellent?*” and “*In general, would you say your mental health is poor, fair, good, very good, or excellent?*”. The SRH is an ordinal measurement tool that uses a 5-point Likert scale ranging from *Poor* (1) to *Excellent* (5; Ahmad et al., 2014).

Comorbidities

Comorbidities were collected by using the following questions: “*Do you have any comorbidities or pre-existing medical conditions (i.e., hypertension, diabetes, hyperlipidemia)?*”.

A dichotomous response was given: Yes or No.

Marital Status

Marital status was collected as follows: Never married, Married, Separated, Divorced, Widowed, and Living with a good friend or partner.

Dependents in the Home

Participants self-reported Dependents in the home by responding to the following question: “*Do you have dependents in the home?*” A dichotomous response was given: Yes or No.

Education Level

Education level was identified as follows: Less than high school, High school diploma or general education development (GED), College/University, and Graduate school.

Employment Location

Indicators of employment location included two items: TWU and UH.

Employment Category

Indicators of employment category included these items: Exempt employees and Non-exempt employees. Non-exempt employees are subject to overtime provisions under the Fair Labor Standards Act and are paid on an hourly basis (TWU, n.d.; UH, n.d.).

Employment Status

Indicators of employment status included these items: Full-time and Part-time.

Length of Employment by the University

The participants self-reported the length of employment at the university in years.

Leadership Position

The leadership position was self-reported by the participants.

Multidimensional Scale of Perceived Social Support

The MSPSS was used to measure the perceived social support of participants. The MSPSS was developed by Zimet et al. (1988) to measure the subjectively assessed level of social support. The MSPSS is a 12-item questionnaire that measures an individual’s perceived social

support from family (4 items), friends (4 items), and significant others (4 items) on a 7-point Likert scale from *Very Strongly Disagree* (1) to *Very Strongly Agree* (7). The psychometric properties of the MSPSS have been tested by studies (Bugajski et al., 2019; Wittenborn et al., 2020). The total instrument yielded high reliability ($\alpha = .85 - .94$), and a confirmatory factor analysis (CFA) revealed three-factor with eigenvalues greater than 1, explaining 57.4%, 14.7%, and 10.2% of the variance, respectively (Bugajski et al. 2019). Wittenborn et al. (2020) also presented an overall high reliability ($\alpha = .93$), and a CFA with a stable three-factor solution with evidence of goodness of fit: Root Mean Square Error of Approximation (RMSEA) = 0.09, Comparative Fit Index (CFI) = 0.97, Tuckers–Lewis Index (TLI) = 0.96, and Standardized Root Mean Square Residual (SRMR) = 0.03. Table 3.1 presents the items in each of the three domains (Zimet et al., 1988).

Table 3.1

The Multidimensional Scale of Perceived Social Support

Domains	Items
Family Support	3. My family really tries to help me.
	4. I get the emotional help and support I need from my family.
	8. I can talk about my problems with my family.
	11. My family is willing to help me make decisions.
Friends Support	6. My friends really try to help me.
	7. I can count on my friends when things go wrong.
	9. I have friends with whom I can share my joys and sorrows.
	12. I can talk about my problems with my friends.

Domains	Items
Significant Other	1. There is a special person who is around when I am in need.
Support	2. There is a special person with whom I can share my joys and sorrows.
	5. I have a special person who is a real source of comfort to me.
	10. There is a special person in my life who cares about my feelings.

Work Factors Survey

The WFS (Hystad et al., 2011) was used to identify workplace environmental factors. This questionnaire was developed to investigate the relationship between psychological hardiness, work environment characteristics, and employee sickness absences in civilian and military employees in the Norwegian Armed Force (Hystad et al., 2011). The WFS has 12 items with three aspects (see Table 3.2):

- Job Control – an employees’ decision latitude, the breadth of skills or abilities used by the employee at work (skill discretion), and the employee’s ability to make decisions about his or her job (decision authority).
- Psychological Demands – the demands placed on the employee by the work environment, such as workload, conflicting job demands, and time pressures.
- Physical Demands – physical aspects of the work environment.

The survey items were rated on a 4-point Likert scale ranging from *Almost never* (1) to *Very often* (4). High scores present high levels of job control, psychological demands, and physical demands. An exploratory factor analysis (EFA) revealed three factors (i.e., job control, psychological demands, and physical work demands), with factor loadings ranging from .36 –.91 (Hystad et al., 2011). The CFA validated the three-factor solution, and goodness-of-fit statistics

showed a good fit: CFI = .93; Goodness of Fit (GFI) = .95; RMSEA = .072; and SRMR = .086 (Hystad et al., 2011). The Cronbach's alpha of the three factors ranged from .71-.85 (Hystad et al., 2011). Hystad et al.'s (2011) study found that hardiness, physical demands, and job control were all significant predictors of employee sickness absence. There was also an increase in absences related to high psychological demands and low job control. In the researcher's pilot study with 13 staff members in UH, the WFS proved to be a moderately reliable instrument with an overall Cronbach's alpha of .667.

Table 3.2

The Work Factors Survey

Domains	Items
Job Control	<p>1. I have the freedom to influence my own work pace.</p> <p>2. I can personally decide when to take breaks from work.</p> <p>3. I have a personal say in the amount of work I have to do.</p> <p>4. I have general freedom to decide and plan my own work day.</p>
Psychological Demands	<p>5. Is your job characterized by a great amount of time pressure?</p> <p>6. Is your job generally stressful and hurried?</p> <p>7. Do you think that you have too much to do?</p> <p>8. Is your work piling up?</p>
Physical Demands	<p>9. I have to work with my hands above shoulder height.</p> <p>10. I work at the upper limit of my physical capacity.</p> <p>11. My job requires me to work in painful positions.</p> <p>12. In my work, I am exposed to a cold and humid environment.</p>

Psychological Well-Being Scale

University staff PWB was measured using Ryff's (1989) PWB Scale. The PWB Scale was developed to measure individual PWB in six domains: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Ryff & Singer, 1996). The instrument has 42 items, with each of the six domains having seven items (see Table 3.3).

Table 3.3

Ryff's (1989) PWB Scale

Domains	Items
Autonomy	1. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people. 7. Most people see me as loving and affectionate. 13. My decisions are not usually influenced by what everyone else is doing. 19. My attitude about myself is probably not as positive as most people feel about themselves. 25. I do not enjoy being in new situations that require me to change my old familiar ways of doing things. 31. When I compare myself to friends and acquaintances, it makes me feel good about who I am. 37. I have the sense that I have developed a lot as a person over time.

Domains	Items
Environmental	2. For me, life has been a continuous process of learning, changing, and
Mastery	growth.
	8. In many ways I feel disappointed about my achievements in life.
	14. I gave up trying to make big improvements or changes in my life a long
	time ago.
	20. I have a sense of direction and purpose in life.
	26. I do not fit very well with the people and the community around me.
	32. I don't have a good sense of what it is I'm trying to accomplish in life.
	38. I enjoy personal and mutual conversations with family members and
	friends.
Personal	3. In general, I feel I am in charge of the situation in which I live.
Growth	9. I live life one day at a time and don't really think about the future.
	15. The demands of everyday life often get me down.
	21. I judge myself by what I think is important, not by the values of what
	others think is important.
	27. I know that I can trust my friends, and they know they can trust me.
	33. I sometimes feel as if I've done all there is to do in life.
	39. My daily activities often seem trivial and unimportant to me.

Domains	Items
Positive	4. People would describe me as a giving person, willing to share my time
Relations with	with others.
Others	10. I tend to worry about what other people think of me. 16. I have not experienced many warm and trusting relationships with others. 22. In general, I feel confident and positive about myself. 28. When I think about it, I haven't really improved much as a person over the years. 34. I feel like many of the people I know have gotten more out of life than I have. 40. I like most parts of my personality.
Purpose in Life	5. I am not interested in activities that will expand my horizons. 11. When I look at the story of my life, I am pleased with how things have turned out. 17. I think it is important to have new experiences that challenge how you think about yourself and the world. 23. I have been able to build a living environment and a lifestyle for myself that is much to my liking. 29. Some people wander aimlessly through life, but I am not one of them. 35. I have confidence in my opinions, even if they are contrary to the general consensus. 41. It's difficult for me to voice my own opinions on controversial matters.

Domains	Items
Self-	6. I enjoy making plans for the future and working to make them a reality.
Acceptance	12. I have difficulty arranging my life in a way that is satisfying to me.
	18. Maintaining close relationships has been difficult and frustrating for me.
	24. I tend to be influenced by people with strong opinions.
	30. I often feel lonely because I have few close friends with whom to share my concerns.
	36. I am quite good at managing the many responsibilities of my daily life.
	42. I often feel overwhelmed by my responsibilities.

The PWB scale is an ordinal measurement tool that uses a 6-point Likert scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (6). The scale has a mix of positively-worded and negatively-worded items. Therefore, the negatively worded items were reverse-scored in the data analysis so that the higher values indicate better well-being. The total score of PWB ranges from 42 – 252. Shryock and Meeks (2018) conducted a 6-factor CFA and revealed reasonable validity: Bentler-Bonett Normed Fit Index (NFI) = .777, CFI = .836, RMSE = .063, p of Close Fit (PClose) = .000, Chi-Square Fit Statistics/Degree of Freedom (CMIN/DF) = 3.089. The PWB scale was also found to be reliable, as evidenced by high internal consistency reliability ($\alpha = .86 - .93$) and test-retest coefficient ranging from .81-.88 (Ryff , 1989).

In the researcher's pilot study with 13 staff members in UH, the total PWB scale proved to be a highly reliable instrument with a Cronbach's alpha of .910, as well as each of the subscales: autonomy ($\alpha = .784$), environmental mastery ($\alpha = .734$), personal growth ($\alpha = .598$),

positive relations with others ($\alpha = .663$), purpose in life ($\alpha = .822$), and self-acceptance ($\alpha = .615$).

Data Collection

For recruiting, the researcher sent a recruitment email and study flyer to the assigned moderator of staff email listservs at TWU (see Appendices D and E). A university-wide announcement was also posted to recruit the study participants at TWU. At UH, the researcher sent emails of the study participation invitation and flyer to the staff using email listservs obtained from the Public Information Officer. To protect the privacy of participants, the researcher used the BCC field to send emails. The recruitment email message and study flyer included a written explanation of the study purpose, qualifications, procedure, expected completion time, incentives, and a link to the online informed consent and questionnaire. Information regarding the study purpose, benefits, and risks was included on the first page of the online survey. By electing to take part in the study, the participants declared that they were at least 18 years old, read and understood the information provided in the consent form, and agreed to voluntarily participate in the research study.

Data Analysis

The data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 28.0. All completed responses through the PsychData survey were exported to SPSS. In the exported dataset, the research data remained separate from the personally identifiable information (i.e., names and email addresses) collected from the incentive entry surveys. The personally identifiable information was separately saved until the grand prize drawing at the completion of the study.

The unit of analysis was at the individual level. Descriptive analyses were performed to summarize the characteristics of the variables and examine data patterns and variability (Polit & Beck, 2021). Frequencies and percentages were calculated for the categorical variables, including gender, race, ethnicity, comorbidities, marital status, dependents in the home, education level, place of employment, employment category, and leadership position. This study also considered the means and standard deviations of scores for the continuous variables such as age, perceived physical health status, perceived mental health status, perceived social support of family, perceived social support of friends, perceived social support of significant other, job control, psychological demands, physical work demands, and length of employment. Independent samples *t*-tests were also performed to compare the mean total PWB and each of PWB sub-scale scores (e.g., Environmental Mastery, Autonomy, Purpose in Life, Personal Growth, Positive Relationships, and Self-Acceptance). Contingency tables were developed to show differences in responses by place of employment.

The first research question, What is the psychological well-being level of staff working in university settings?, was addressed by descriptive statistics (mean and standard deviation) of total PWB score and subscale PWB scores.

For Research Questions 2-4, correlational analysis and hierarchical multiple regression were performed to explain the influence of personal, social, and workplace environmental factors on the PWB of university staff. Multiple regression is used to analyze the relationship between a single dependent variable and various independent variables (Pallant, 2016). In this study, PWB was the dependent variable, and the independent variables were the personal, social, and workplace environmental factors.

Multiple regression requires the following statistical assumptions of the data (Pallant, 2016): (a) normality: the residuals should be normally distributed, (b) linearity: the residuals should have a straight-line relationship, (c) homoscedasticity: the variance of the residuals should be the same for all predicted scores, (d) absence of multicollinearity: when the independent variables (IV) are highly correlated ($r = .9$ or higher). Descriptive analysis was conducted first to describe the means and standard deviations of the personal, social, and workplace environmental factors. A scatterplot was used to assess for homoscedasticity and outliers; the assumption of homoscedasticity was met. There were no outliers. A histogram was used to assess normality; the research variables were found to be normally distributed. Skewness and Kurtosis were also evaluated for the distribution of scores for symmetry and peakedness (Pallant, 2016). Skewness values of the variables fell between -1.49 and +1.93, and their kurtosis values fell between -2.02 and +3.94; the normality, therefore, was determined to be acceptable. In evaluating for multicollinearity, the correlation matrix was reviewed to ensure that correlation coefficients across variables were less than .90 and Variance Inflation Factor (VIF) were less than 10 (Pallant, 2016); there was no evidence of multicollinearity.

When multiple regression has too many variables, redundancy is evident (Polit & Beck, 2016). Thus, a zero-order correlation was reviewed for entering statistically significant variables out of many variables into multiple regression. The Pearson correlation coefficient (r) was used to interpret the linear direction and strength between two variables (Pallant, 2016). Only personal, social, and workplace environmental factors showing $p \leq .15$ from the zero-order correlation were entered into hierarchical multiple regression analysis. However, in the multiple regression analysis, the level of significance will be set at $p = .05$ to identify significant predictors of PWB of university staff.

Summary

This chapter illustrates the methodology of the empirical study. A descriptive cross-sectional, correlational study design was used to examine the PWB and personal, social, and workplace environmental factors influencing PWB in university staff. Upon IRB approval, study recruitment occurred at TWU and UH. University staff participants aged 18 and up were recruited using convenience sampling. A PsychData electronic survey was used to collect data securely. Potential risks of this study were loss of confidentiality and loss of anonymity. Participants were asked to provide consent before voluntarily completing the online survey, and several strategies were implemented to minimize any risks, including (1) the use of BBC field with email communications, (2) storage of personally identifiable information in an encrypted, password-protected file, (3) storage of research data in a password-protected database, and (4) saving of personally identifiable information separate from research data. An 82-item PsychData survey containing four parts (i.e., demographics, MSPSS, WFS, Ryff's PWB Scale) was used to collect data for this study. Descriptive statistics were to characterize the personal, social, and workplace environmental factors of the study sample and determine the level of PWB of university staff. Pearson's correlational analysis was conducted to examine the relationships among the variables. Hierarchical multiple regression was performed to determine the impact of personal, social, and workplace environmental factors on the PWB of university staff.

CHAPTER IV

PERSONAL, SOCIAL, AND WORKPLACE ENVIRONMENTAL FACTORS RELATED TO
PSYCHOLOGICAL WELL-BEING OF STAFF IN UNIVERSITY SETTINGS

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Abstract

Background

Assessing the extent of psychological well-being (PWB) of university staff and examining what factors have affected their PWB is a preliminary step to developing intervention programs that promote PWB and enhance productivity and worker engagement from the university perspective. This study aimed to describe the level of PWB in university staff and identify personal, social, and workplace environmental factors related to their PWB. This study adopted Ryff's (1989) PWB model as the conceptual framework.

Methods

A descriptive cross-sectional, correlational study design was used. Descriptive statistics were used to characterize the study variables and determine the level of PWB of university staff. Correlational analysis was conducted to examine the relationships among the variables. Hierarchical multiple regression was performed to assess the impact of personal, social, and workplace environmental factors on the PWB of university staff.

Results

This study found that the total PWB level scored by university staff was in the upper quartile at University A ($M = 214.25$, $SD = 34.02$) and University B ($M = 208.78$, $SD = 37.97$) out of the maximum level, 252. There were significant associations between PWB of university staff and personal (i.e., age, race, perceived physical health status, perceived mental health status), social (i.e., social support of family, social support of friends, and social support of significant others), and workplace environmental factors (i.e., job control, psychological demands, and physical demands). Among these factors, race, perceived mental health status, social support of friends, and workplace physical demands were identified as the most significant influencing factors of university staff PWB.

Implications

Evidence from this research will provide helpful information for occupational health nurses (OHN) and other stakeholders (e.g., administrators, faculty, and staff) in university settings in assessing the level of PWB and related personal, social, and workplace environmental factors. Additionally, the results of this research highlight the need to track and monitor significant findings.

Keywords: *Psychological well-being, University staff, Workplace environmental factor*

Background

There are nearly four million workers employed by institutions of higher education or universities in the United States (Institute of Education Sciences, 2018). University staff takes information-intensive positions performing administrative and technical duties, which significantly influence the campus community (Ogunbodede & Ambrose, 2020). University staff members are constantly interfaced with students seeking guidance for academic advisement,

auxiliary services, and emotional support; their engagements directly impact student satisfaction and success (Guifoile & Krimpelbein, 2017). University employees are challenged by extensive organizational change, increased workload, and decreased governmental funding (Kaiser et al., 2021; Vandiya & Hidayat, 2018). The job demands (workload, work conflict, and work-family conflict) impacted burnout and engagement of university employees (Kaiser et al., 2021).

Recently, the COVID-19 pandemic has caused universities to experience higher turnover rates of 35% (Umpierrez, 2021). During the COVID-19 pandemic, approximately 80% of university employees reported higher levels of stress and feelings of anger as the result of increased job demands and the deterioration of work-life balance (Kaiser et al., 2021). As universities experience increases in turnover rates and mental health issues of university employees, which can impact student learning and university operation, the PWB of university employees has become a substantial concern for academic administration after the COVID-19 pandemic. However, the PWB status of this population has not been well-investigated (González-Rico et al., 2018). Further, less knowledge is available regarding the relationship between the level of PWB and the related personal, social, and workplace environmental factors for employees in a university setting.

University administrators need to understand the impact of low PWB on both the individual employee and the institution. Low PWB of university employees directly affects their overall wellness (e.g., anxiety, stress) and impedes student well-being (e.g., decreased support) (Brewster et al., 2022; Williams et al., 2017). There is a significant need to promote the PWB of university staff to reduce the risk of developing chronic health diseases, improve the workforce's overall health function, and support student academic outcomes (Brewster et al., 2022). University administrators should develop policies and programs that promote employee

engagement, reduce burnout, lower healthcare costs, and improve the PWB of university employees (Hill-Mey et al., 2015).

Recently, the number of universities adopting workplace well-being programs has grown to promote wellness and correct health-related problems of faculty, staff, and students (Brantley & Shomaker, 2021; Brewster et al., 2022; Travia et al., 2022). However, the programs have often experienced challenges related to organizational policies and culture that prioritize productivity and workload, in addition to the poor support of the inter-relationship between university staff and student well-being (Brantley & Shomaker, 2021; Brewster et al., 2022). To better design effective programs or resources to address PWB in university staff, identifying factors influencing PWB is essential to protect university staff from mental and physical illnesses.

Purpose

This study aimed to describe the level of psychological well-being perceived by university staff and identify personal, social, and workplace environmental factors related to their PWB.

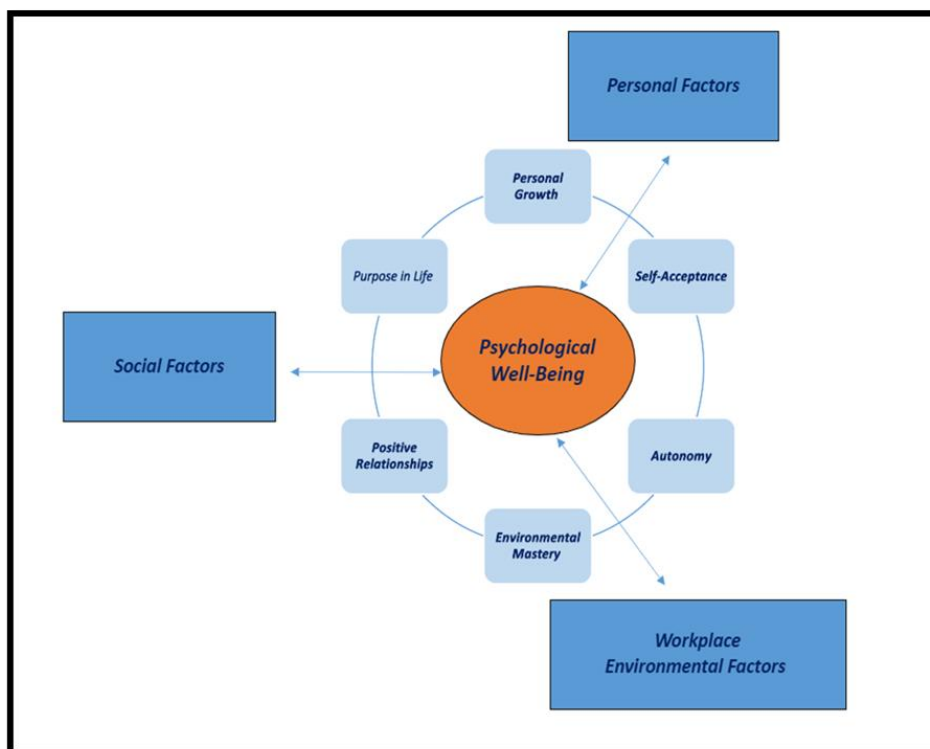
Conceptual Framework

PWB is defined as “the combination of positive affective states such as happiness (the hedonic perspective) and functioning with optimal effectiveness in individual and social life (the eudaimonic perspective)” (Winefield et al., 2012, para. 2). This study followed a conceptual framework adapted from Ryff’s (1989) PWB model. Carol Ryff developed the model in 1989 to focus on positive functioning and the fundamental characteristics of PWB, such as *Autonomy*, *Environmental Mastery*, *Personal Growth*, *Positive Relationships with Others*, *Purpose in Life*, and *Self-Acceptance* (Ryff, 2014).

According to Ryff (2014), PWB measured whether individuals viewed themselves to be living in accord with their personal convictions (*Autonomy*); how well they were managing their life situations (*Environmental Mastery*); the extent to which they were making use of their personal talents and potential (*Personal Growth*); the depth of connection they had in ties with significant others (*Positive Relationships*); the extent to which respondents felt their lives had meaning, purpose, and direction (*Purpose In Life*); and the knowledge and acceptance they had of themselves, including awareness of personal limitations (*Self-Acceptance*). The current research study assumed that the PWB of university staff could be influenced by personal, social, and workplace environmental factors, as depicted in Figure 4.1.

Figure 4.1

Conceptual Framework



Note. Adapted from Carol Ryff's (1989) Psychological Well-Being (PWB) model.

Methods

Research Design and Sample

This study used a cross-sectional, descriptive correlational design to explore the levels of PWB among university staff and examine influential factors to their PWB through an online survey. A convenience sample of university staff participants was recruited from two universities in the State of Texas. The inclusion criteria were as follows: the university staff should be 1) regular full-time staff (working in a normal schedule of 40 hours per week) or part-time staff (working in a normal schedule of at least 20 but less than 40 hours per week for a minimum of four and one-half consecutive months (Texas Woman's University [TWU], 2022; University of Houston [UH], 2022) and 2) aged 18 years and older. The exclusion criteria are non-regular employees who are not eligible for benefits, faculty, instructional academic staff, student employees, or temporary employees (i.e., camp assistants, lab assistants, mentors, and program assistants).

Instruments

The demographic questionnaire was composed of 16 items to capture information on personal, social, and workplace environmental factors. Personal factors included gender, age, race, ethnicity, education level, perceived health status, and comorbidities. Variables for social factors included marital status, dependents in the home, and perceived social support. Workplace environmental factors included employment location, employment category, employment status, length of employment by the university, leadership position, job control, psychological demands, and physical work demands.

Perceived Health Status

The perceived health status was measured by the Self-Rated Health (SRH) tool with two items asking a subjective reflection of physical and mental health status on a 5-point Likert scale ranging from *Poor* (1) to *Excellent* (5) (Ahmad et al., 2014).

Multidimensional Scale of Perceived Social Support

Participants' perceived social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al. (1988). The MSPSS is a 12-item questionnaire that measures an individual's perceived social support from family (4 items), friends (4 items), and significant others (4 items) on a 7-point Likert scale from *Very Strongly Disagree* (1) to *Very Strongly Agree* (7). The high reliability of the MSPSS has been proven in previous studies with $\alpha = .85 - .94$ (Bugajski et al., 2019; Wittenborn et al., 2020). For this sample, the Cronbach reliability coefficient was $\alpha = .93$.

Work Factors Survey

The Work Factors Survey (WFS; Hystad et al., 2011) was used to identify workplace environmental factors. The WFS has 12 items with three aspects: Job Control (four items), Psychological Demands (four items), and Physical Demands (four items). The survey items are rated on a 4-point Likert scale ranging from *Almost never* (1) to *Very often* (4). Cronbach's alpha of this questionnaire was .65 in this study.

PWB Scale

University staff PWB was measured using Ryff's (1989) PWB Scale. The PWB Scale had 42 items, having seven items per each of the six domains: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Ryff & Singer, 1996). In this study, the total PWB scale proved to be a highly reliable instrument with a

Cronbach's alpha of .92, as well as each of the subscales: autonomy ($\alpha = .75$), environmental mastery ($\alpha = .80$), personal growth ($\alpha = .78$), positive relations with others ($\alpha = .75$), purpose in life ($\alpha = .83$), and self-acceptance ($\alpha = .86$).

Data Collection Procedure

For recruiting, the researcher sent a recruitment email and study flyer to the assigned moderator of staff email listservs at University A. A university-wide announcement was also posted to recruit the study participants at University A. At University B, the researcher sent emails of the study participation invitation and flyer to the staff using email listservs obtained from the Public Information Officer. To protect the privacy of participants, the researcher used the BCC field to send emails. The recruitment email message and study flyer included a written explanation of the study purpose, qualifications, procedure, expected completion time, incentives, and a link to the online informed consent and questionnaire. By electing to take part in the study, the participants declared that they were at least 18 years old, read and understood the information provided in the consent form, and agreed to voluntarily participate in the study.

Data Analysis

A total of 225 staff from two universities participated in this study. Thirteen cases were removed from the data analysis as none of the PWB scale items were completed. Five cases reported non-binary gender, and an additional five cases reported part-time work status. These ten cases were removed from the data analysis because they were determined to have low statistical power. The final sample size was 202 university staff participants.

All analyses were performed using the Statistical Package for the Social Sciences (SPSS) version 28.0. Descriptive statistics (i.e., frequency, percentages, mean, and standard deviation) were used to describe the distribution of participants' demographic characteristics. Independent

t-tests and analysis of variance (ANOVA) identified whether there were differences in total PWB levels across demographic characteristics.

Pearson correlation coefficients of total PWB, PWB subscales, personal, social, and workplace environmental factors were computed through zero-order correlation analysis. Next, the variables showing correlation with PWB at $p < .15$ were entered into a hierarchical regression analysis to identify significant personal, social, and workplace environmental factors on the PWB of university staff. Preliminary statistical assumption tests were performed prior to the hierarchical regression analysis to ensure no violation of normality, linearity, multicollinearity, and homoscedasticity of the data (Pallant, 2016). Scatterplots were used to assess for linearity, homoscedasticity, and outliers. Histograms, skewness, and kurtosis were evaluated to determine normality. In evaluating for multicollinearity, the correlation matrix was reviewed to ensure that correlation coefficients across variables were less than .90 and the Variance Inflation Factor (VIF) was less than 10. No statistical assumptions had been violated.

In the hierarchical regression analysis, independent variables were entered into three models in the order of personal, social, and environmental factors. Model one included personal factors: age, race, perceived physical health, and perceived mental health. In model two, the following social factors were entered as predictors of PWB: perceived social support of family, perceived social support of friends, and perceived social support of significant others. Lastly, the following workplace environmental factors were entered into model three: leadership position and work factors (job control, psychological demands, and physical demands). The resulting change in *R*-squared values and the beta-weights for each variable were examined to determine which personal, social, or workplace environmental factors accounted for more variance in

PWB. The level of significance was set at $p = .05$ to identify significant predictors of PWB of university staff.

Results

Participant Characteristics (Personal, Social, and Workplace Environmental Factors)

As displayed in Table 4.1, study participants were predominantly female ($n = 150$, 74.3%). The age range of study participants was 19 to 74 years ($M = 42.06$, $SD = 12.94$). Most participants were White (66.3%), followed by Black or African American (18.8%), Asian (5.9%), and American Indian or Alaskan Native (1%). Sixteen participants (7.9%) reported their race as Other, which included a variety of mixed-race responses. More than three-quarters of study participants reported their ethnicity as non-Hispanic (79.7%). The perceived physical health of study participants was good ($M = 3.13$, $SD = .85$), which was slightly higher than their perceived mental health status ($M = 2.93$, $SD = .91$). Over half (57.9%) of the participants reported having comorbidities (e.g., hypertension, diabetes, hyperlipidemia, kidney disease, asthma, joint disease, etc.). The highest level of education reported by the participants was as follows: graduate degree (49%), college/university (39.1%), and high school diploma or general educational development (11.9%).

The marital status of the participants was as follows: married (48%), never married (27.2%), divorced (12.4%), reported living with a good friend or partner (9.4%), widowed (2%), and separated (1%). Approximately 59.4% of participants had dependents living in the home. The overall MSPSS scores of participants were moderately high ($M = 63.08$, $SD = 14.96$) out of the maximum score, 84; the social support of significant others ($M = 21.75$, $SD = 6.79$) was slightly greater than the social support of friends ($M = 20.73$, $SD = 5.78$) and family ($M = 20.60$, $SD = 5.87$).

Table 4.1*Participants' Demographics and Total Psychological Well-Being (N = 202)*

Variable	N	%	M (SD)	t/F	p	d
Gender						
Male	52	25.7%	211.35 (40.96)	.06	.95	.01
Female	150	74.3%	210.99 (34.79)			
Race						
American Indian or Alaskan Native	2	1%	223.50 (36.52)	1.93	.11	.04
Asian	12	5.9%	210.75 (37.92)			
Black or African-American	38	18.8%	225.00 (38.79)			
White	134	66.3%	206.88 (35.44)			
Other	16	7.9%	211.88 (33.75)			
Ethnicity						
Hispanic	41	20.3%	212.77 (37.94)	1.31	.19	.23
Non-Hispanic	161	79.7%	204.44 (28.83)			
Comorbidities						
No	117	57.9%	212.06 (36.73)	.45*	.65*	.06
Yes	85	42.1%	209.73 (36.04)			
Highest Level of Education						
High school diploma or GED	24	11.9%	205.42 (40.65)	.52	.59	.01
College/University	79	39.1%	209.94 (37.80)			
Graduate school	99	49%	213.36 (34.26)			
Marital Status						
Never Married	55	27.2%	203.04 (37.66)	1.55	.18	.04
Married	97	48%	214.16 (35.39)			
Separated	2	1%	201.50 (4.95)			

Variable	N	%	M (SD)	t/F	p	d
Divorced	25	12.4%	223.80 (30.53)			
Widowed	4	2%	212.50 (63.93)			
Living with a good friend or partner	19	9.4%	202.58 (36.76)			
Dependents in the Home						
No	120	59.4%	211.53 (37.65)	.21	.83	.03
Yes	82	40.6%	210.43 (34.63)			
Place of Employment						
University A	85	42.1%	214.25 (34.02)	1.06	.29	.15
University B	117	57.9%	208.78 (37.97)			
Employment Category						
Non-Exempt	41	20.3%	206.80 (38.46)	.81*	.42*	.15
Exempt	161	79.7%	212.17 (35.86)			
Leadership Position						
No	138	68.3%	208.42 (35.42)	1.53	.13	.23
Yes	64	31.7%	216.81 (37.99)			

Note. *Equal variance not assumed; Total psychological well-being (PWB) score ranges between 42 and 252

Most participants were in the exempt employment category (79.7%), whereas 31.7% held a leadership position. The years employed by the university ranged from zero to 44 years ($M = 6.75$, $SD = 5.14$). The overall WFS scores of participants were moderately high ($M = 26.28$, $SD = 4.82$) out of the maximum score, 48. The participants reported high levels of job control ($M = 12.09$, $SD = 2.48$), moderately high levels of psychological demands ($M = 10.15$, $SD = 3.32$), and low levels of physical demands ($M = 5.15$, $SD = 1.97$).

The total PWB level of female participants ($M = 210.99$, $SD = 40.96$) was slightly lower than male participants ($M = 211.35$, $SD = 40.96$). Among racial groups, the total PWB level of Black or African-American was the highest ($M = 225.00$, $SD = 38.79$). Non-Hispanic participants reported a lower total PWB level ($M = 204.44$, $SD = 28.83$) than Hispanic ($M = 212.77$, $SD = 37.94$). Participants reporting comorbidities had a lower total PWB ($M = 209.73$, $SD = 36.04$) than participants without comorbidities ($M = 212.06$, $SD = 36.73$). The total PWB level of the divorced participants was the highest ($M = 223.80$, $SD = 30.53$). There was little difference in total PWB levels between participants with dependents in the home ($M = 210.43$, $SD = 34.63$) and participants without dependents in the home ($M = 211.53$, $SD = 37.65$). University staff with graduate degrees reported slightly higher levels of total PWB ($M = 213.36$, $SD = 34.26$), followed by the staff with college/university ($M = 209.94$, $SD = 37.80$) and those with high school diploma or GED ($M = 205.42$, $SD = 40.65$). The total PWB of exempt university staff was marginally higher ($M = 212.17$, $SD = 35.86$) than the non-exempt staff ($M = 206.80$, $SD = 38.46$). Participants in leadership positions reported having a greater level of total PWB ($M = 216.81$, $SD = 37.99$) than those not in a leadership position ($M = 208.42$, $SD = 35.42$). However, independent t -tests and one-way ANOVA revealed no statistical significance in the total PWB level differences by gender, race, ethnicity, comorbidities presence, level of education, marital status, dependents in the home, place of employment, employment category, and leadership position (see Table 4.1).

The PWB Level of University Staff

Table 4.2 presents the total psychological well-being and sub-scales scores across University A and University B participants. Staff working in University A reported higher PWB; however, there was no significant difference in total PWB scores (University A [$M = 214.25$, SD

= 34.02]; University B [$M = 208.78$, $SD = 37.97$]; $t[200] = 1.06$, $p = .29$). Among PWB subscales, personal growth perception was notably higher in staff working at University A ($M = 41.00$, $SD = 6.03$) than that of staff working at University B ($M = 39.29$, $SD = 7.04$), $t(200) = 1.81$, $p = .07$). Regarding the remaining PWB subscales, there was not statistically significant difference across the universities.

Table 4.2

Total Psychological Well-Being Level and Sub-Scales Scores Across Universities

	University A	University B				
	Mean (<i>SD</i>)	Mean (<i>SD</i>)	<i>df</i>	<i>t</i>	<i>p</i>	<i>d</i>
Autonomy	33.74 (7.42)	32.64 (8.03)	200	.99	.32	.14
Environmental Mastery	32.34 (8.10)	32.28 (8.61)	200	.05	.96	.01
Personal Growth	41.00 (6.03)	39.29 (7.04)	200	1.81	.07	.26
Positive Relations with Others	37.32 (7.15)	36.59 (7.74)	200	.68	.50	.10
Purpose in Life	37.38 (8.77)	36.04 (8.45)	200	1.09	.28	.16
Self-Acceptance	32.47 (9.50)	31.93 (9.03)	200	.41	.68	.06
Total PWB	214.25 (34.02)	208.78 (37.97)	200	1.06	.29	.15

Note. Total psychological well-being (PWB) score ranges between 42 and 252. Each subscale score ranges between 7 and 42. Higher scores indicate high psychological well-being.

Personal, Social, and Workplace Environmental Factors Related to PWB

Among *personal factors*, age ($r = .23$, $p < .001$), race ($r = -.16$, $p = .02$), perceived physical health status ($r = .32$, $p < .001$), perceived mental health status ($r = .58$, $p < .001$) were

significantly associated with total PWB of university staff (see Table 4.3). Gender ($r = -.004$, $p = .95$), ethnicity ($r = -.09$, $p = .19$), comorbidities presence ($r = -.03$, $p = .65$), education level ($r = .06$, $p = .38$) were not significantly associated with total PWB level. Similar relationships between personal factors and PWB subscales were found.

Social factors significantly associated with total PWB were perceived social support – family ($r = .35$, $p < .001$), social support – friends ($r = .31$, $p < .001$), and social support – significant others ($r = .26$, $p < .001$); similar significant associations between the perceived social support and total PWB were discovered. Marital status ($r = .08$, $p = .25$) and dependents in the home ($r = -.02$, $p = .83$) were not significantly associated with total PWB level; they did not show significant relationship with PWB subscales either.

Workplace environmental factors that showed a statistically significant association with total PWB were leadership position ($r = .11$, $p = .13$), work factors – job control ($r = .22$, $p = .002$), work factors – psychological demands ($r = -.19$, $p = .006$), work factors – physical demands ($r = -.13$, $p = .07$). Work location ($r = .07$, $p = .29$), work category ($r = .06$, $p = .40$), and length of employment ($r = .04$, $p = .55$) were not significantly associated with total PWB; similar relationships were found with PWB subscales.

The correlations among all the PWB subscales and total PWB scales were significant: autonomy ($r = .56$, $p < .001$), environmental mastery ($r = .85$, $p < .001$), personal growth ($r = .72$, $p < .001$), positive relations with others ($r = .68$, $p < .001$), purpose in life ($r = .83$, $p < .001$), and self-acceptance ($r = .85$, $p < .001$; see Table 4.3).

Table 4.3

Correlation Coefficients Between Personal Factors, Social Factors, Workplace Environmental Factors, and Psychological Well-Being

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1. Age	-																
2. Race	.02	-															
3. Perceived Physical Health	.23**	-.03	-														
4. Perceived Mental Health	.35**	-.07	.42**	-													
5. SS – Family	.04	-.04	.21**	.27**	-												
6. SS – Friends	-.07	-.08	.07	.16*	.49**	-											
7. SS – Significant other	-.02	.06	.14	.26**	.61**	.36**	-										
8. Leadership Position	.14	.08	.10	.08	.11	.05	.18**	-									
9. WF – Job Control	.15*	-.03	.06	.17*	.11	.07	.15*	.06	-								
10. WF – Psychological Demands	.07	.07	-.09	-.13	-.11	.02	-.05	.05	-.23**	-							
11. WF – Physical Demands	.01	.03	.02	.02	-.01	.06	-.04	.08	-.23**	.18*	-						
12. PWB – Autonomy	.19**	-.15*	.24**	.31**	.15*	.12	.04	.03	-.01	-.10	-.04	-					
13. PWB – Environmental Mastery	.25**	-.13	.30**	.60**	.31**	.20**	.21**	.14*	.29**	-.30**	-.09	.32**	-				
14. PWB – Personal Growth	.05	-.09	.16*	.28**	.12	.12	.16*	.07	.11	-.10	-.11	.35**	.51**	-			
15. PWB – Positive Relations with Others	.15*	-.09	.21**	.39**	.44**	.54**	.26**	.06	.13	-.06	-.08	.21**	.54**	.38**	-		
16. PWB – Purpose in Life	.17*	-.14	.18**	.44**	.25**	.19**	.21**	.04	.16*	-.15*	-.12	.28**	.68**	.58**	.50**	-	
17. PWB – Self-Acceptance	.20**	-.14	.33**	.56**	.30**	.25**	.28**	.13	.26**	-.14*	-.13	.39**	.75**	.52**	.47**	.65**	-
18. PWB – Total	.23**	-.16*	.32**	.58**	.35**	.31**	.26**	.11^	.22**	-.19**	-.13^	.56**	.85**	.72**	.68**	.83**	.85**

Note. ^ $p < .15$, * $p < .05$, ** $p < .01$. SS = Social Support; WF = Work Factors; PWB = psychological well-being. Race coded as 0 = non-

White and 1 = White; Leadership position coded as 0 = no and 1 = yes.

Based on these findings, age, race, perceived physical health, perceived mental health, social support – family, social support – friends, social support – significant other, leadership position, work factors – job control, work factors – psychological demands, and work factors – physical demands were determined to be significantly ($p < .15$) related to total PWB and entered as predictors in the subsequent regression analyses.

From hierarchical multiple regression analysis, the first model with personal factors only accounted for 36% of the variance in total PWB ($F(4, 197) = 27.64$, $R^2 = .36$, adjusted $R^2 = .35$, $p < .001$). After adding social factors (i.e., social support – family, social support – friends, and social support – significant other), the second regression model accounted for 42% of the variance in total PWB ($F(7, 194) = 19.97$, $R^2 = .42$, adjusted $R^2 = .40$, $p < .001$). The change of R^2 between the first and second models was 6% ($\Delta R^2 = .06$) and was statistically significant ($p < .001$). The third model with all personal, social, and workplace environmental factors accounted for 45% of the variance in total PWB ($F(11, 190) = 14.38$, $p < .001$, $R^2 = .45$, adjusted $R^2 = .42$). R^2 change of 4% ($\Delta R^2 = .04$) between the second and third regression models was also statistically significant ($p = .01$; see Table 4.4).

Table 4.4

Summary of Hierarchical Regression Model for Total Psychological Well-Being

Model	SS	df	MS	F	p	R^2	Adjusted R^2	SE
1	95573.65	4	23893.41	27.64	< .001	.36	.35	29.40
2	111362.46	7	15908.92	19.97	< .001	.42	.40	28.22
3	120783.70	11	10980.34	14.38	<.001	.45	.42	27.63

Note. Model 1 variables (Age, Race, Perceived Physical Health, Perceived Mental Health);

Model 2 variables (Social Support – Family, Friends, Significant Other); Model 3 variables

(Leadership Position, Work Factors – Job Control, Psychological Demands, Physical Demands).

SS = Sum of Squares; MS = Mean Squares. SE = Standard Error.

In the regression model three with personal, social and workplace environmental factors, race ($\beta = -.11, p = .05$), perceived mental health status ($\beta = .45, p < .001$), social support – friends ($\beta = .19, p = .003$), and work factors – physical demands ($\beta = -.14, p = .02$) were significant predictors of total PWB at the $p < .05$ level (see Table 4.5).

Table 4.5

Regression Coefficients of Personal Factors, Social Factors, and Workplace Environmental Factors on Psychological Well-Being

Variable	Unstandardized		Standardized	<i>t</i>	<i>p</i>
	<i>b</i>	<i>SE</i>	β		
Age	.18	.17	.06	1.05	.30
Race	-8.25	4.18	-.11	-1.97	.05
Perceived Physical Health Status	2.82	2.57	.07	1.10	.27
Perceived Mental Health Status	17.95	2.61	.45	6.89	< .001
Social Support – Family	2.50	1.85	.10	1.35	.18
Social Support – Friends	4.85	1.59	.19	3.05	.003
Social Support – Significant Others	-.33	1.51	-.02	-.22	.83
Leadership Position	4.80	4.34	.06	1.11	.27
Work Factors – Job Control	.74	.85	.05	.88	.38
Work Factors – Psychological Demands	-3.88	2.51	-.09	-1.55	.12
Work Factors – Physical Demands	-9.12	4.15	-.12	-2.20	.03

Note. Race (0 = non-White and 1 = White); Leadership position (0 = no and 1 = yes)

Discussion

This study identified the total PWB level scored by university staff was in the upper quartile at University A ($M = 214.25$, $SD = 34.02$) and University B ($M = 208.78$, $SD = 37.97$) out of the maximum level, 252. In investigating the PWB subscale scores, staff at both universities scored highest on Personal Growth, Positive Relations with Others, and Purpose in Life. On the other hand, a previous study of millennial workers reported that the PWB subscale scores for Self-Acceptance and Positive Relationships with Others were mostly high, while Autonomy, Environmental Mastery, Purpose in Life, and Personal Growth were low (Oktavia et al., 2020). In the current study, the relationships of Environmental Mastery, Self-Acceptance, and Purpose in Life subscales with total PWB were stronger than the relationships of other subscales with total PWB level. Another study of employees in Slovenia found that the association between PWB and autonomy was stronger than the relationship among others (Šarotar Žižek et al., 2015). These gaps across studies can occur with different types of workers and call for studies with staff from more universities.

In the investigation of significant factors influencing the PWB of university staff, race and perceived health status were significant personal factors. It is notable that perceived mental health status was the strongest predictor of total PWB level in the university staff. High job demands, insufficient resources, and poor management of university staff have consistently been associated with increased mental health issues (i.e., stress, anxiety, depression, and other mental health difficulties; Brewster et al., 2021; Kaiser et al., 2021). Therefore, it is essential to provide programs or resources for mental health support for university staff. In the current study, race was also significantly associated with PWB; Whites had lower levels of total PWB, while African Americans showed higher total PWB levels. This finding contradicts previous research

on the relationship between race and PWB (Chang et al., 2014; Schmitt et al., 2014). Chang et al. (2014) study with adult psychiatric patients in New England found that in response to the psychiatric treatment, Asians reported the highest PWB, whereas Blacks had the lowest. Another research study found that African Americans consistently exposed to racial stigmatization and threats showed lower PWB (Schmitt et al., 2014). Therefore, it is suggested that this research be conducted in other universities to further investigate the impact of race and perceived health status on PWB. The comprised information can be used in the development of PWB intervention programs that appropriately promote the PWB of university staff.

Among social factors, the perceived social support of family, friends, and significant others was positively associated with higher scores of total PWB in the correlation analysis. However, social support from friends was the only significant predictor for total PWB in the university staff. Previous studies have also found a positive correlation between social support and the PWB of university students (Adyani et al., 2019; Saputra & Palupi, 2020). Considering the obtained findings of this current research study and results revealed from previous research, it can be concluded that social support is positively correlated with PWB in a university setting. Therefore, the need to create an organizational climate or culture that includes the social support of friends and colleagues should be considered.

Regarding workplace environmental factors, this study found having a leadership position and perceived work factors (i.e., job control, psychological demands, and physical demands) were significantly associated with total PWB. Specifically, higher levels of job control, lower levels of psychological demands, and lower levels of physical demands were associated with higher levels of total PWB. Furthermore, physical demand was a significant predictor of the total PWB in the university staff. This study's results were consistent with

previous studies that reported that individual PWB was affected by workplace environmental factors. Researchers have determined that workplace environmental factors, such as inadequate physical working conditions, such as temperature, ventilation, lighting, poor layout, and other physical work conditions, have negatively impacted the PWB of employees (Akerboom & Maes, 2006; Chandrasekar, 2011). Mudrak et al. (2018) determined that job resources (e.g., job control, support from supervisor) and job demands (e.g., job insecurity, work-family conflicts) were significantly related to faculty well-being in the Czech Republic. Schütte et al. (2014), in their study with European employees, found a significant association between poor PWB and negative work factors, including high job demands, low quality of leadership, and low sense of community. Winefield et al. (2014) identified that workplace factors positively impacting PWB of Australian university employees included improving job control and reducing job demands.

Implications for Occupational Health Practice

Multiple studies have discussed how employees' PWB directly impacts employee satisfaction, mental health, and physical health (Chandrasekar, 2011; Coutinho et al., 2018; Kinman & Johnson, 2019; Mudrak et al., 2018; Rigotti et al., 2021; Robertson et al., 2012). Positive PWB has shown an increase in overall employee satisfaction and worker engagement (Coutinho et al., 2018; Mudrak et al., 2018; Rigotti et al., 2021) and is highly correlated with the individual's job performance (Chandrasekar, 2011; Kinman & Johnson, 2019; Robertson et al., 2012).

This study's findings provide helpful information for occupational health nurses (OHN) and other stakeholders (e.g., administrators, faculty, and staff) in university settings in assessing the level of PWB and related personal, social, and workplace environmental factors. To better design effective programs or resources to address PWB in university staff, careful consideration

of factors influencing PWB is essential. For example, OHNs are recommended to track and monitor physical health status, mental health status, social support resources, and workplace environment in addition to the PWB of university staff, considering different racial groups. The collected information can be used to develop optimal intervention programs that promote the PWB of not only university staff, but also faculty and students. In evaluating the effectiveness of implemented PWB programs, university administrators should consider not only the improvement of university staff PWB but also the impact on student retention and outcomes.

Implications for Nursing Research

Future studies should further explore the influence of personal, social, and workplace environmental factors on the PWB of university staff using a different methodology (e.g., qualitative, mixed methods). Also, additional research is needed to better understand the differences in PWB between racial groups and how to effectively promote their PWB.

This study added evidence to the knowledge from previous studies that social support is a significant predictor of PWB. Particularly, this current study found that university staff perceived higher levels of social support from friends were likely to have higher levels of total PWB. Thus, developing a program to enhance social support or networking is encouraged. This study also revealed that high job control, low psychological demands, and low physical demands were associated with high levels of total PWB, although physical demand was the only significant predictor of the total PWB of university staff. Their total PWB levels were significantly associated with Environmental Mastery, Self-Acceptance, and Purpose in Life PWB subscales. According to Ryff (2014), Environmental Mastery describes how well an individual manages their life situations; Self-Acceptance is about the knowledge and acceptance an individual has of themselves, including their awareness of personal limitations; Purpose in Life is the extent to

which respondents feel their lives have meaning, purpose and direction. Therefore, when developing a PWB promotion program, careful assessment of social support, workforce environmental factors, and each subscale of PWB should be prioritized; the investigation of their relationships is also necessary. A longitudinal approach is encouraged to assess the effectiveness of intervention strategies on PWB promotion.

Limitations

There are several limitations that may impact the overall results of this study. First, the study depended on the participants' voluntary survey responses. Fear of management retaliation may persuade employees to report higher PWB or refusal to respond, thus introducing the possibility of response bias. Therefore, protection of anonymity and confidentiality of the survey responses was informed to protect the participants. Part-time staff, faculty, and non-binary gender were not considered in this research study, which could have impacted the results. The research was also limited to two public universities in the state of Texas. So, the results cannot be generalized to all university staff. Future research will need to consider universities in other regional settings. Further, the sample was predominately White Non-Hispanic females; therefore, the results of this study should be interpreted cautiously. Future research will need to include samples from a more inclusive demographic population and multiple geographical university settings.

Conclusion

This study found that the PWB level of university staff was in the upper quartile. Also, PWB of university staff was significantly associated with personal, social, and workplace environmental factors. In particular, perceived mental health status, social support – friends, work factors – physical demands, and race significantly predicted the PWB of university staff.

These findings recommend university stakeholders consider continuous monitoring such factors and PWB of university staff and developing workplace policies and programs that promote their PWB. Longitudinal future studies are recommended to examine the effectiveness of health promotion strategies to mitigate psychological distress and promote the PWB of university staff.

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CHAPTER V

SUMMARY OF THE STUDY

This chapter presents a synthesis of two manuscripts: a concept analysis of WPD and an empirical study that examined the PWB of university staff. The compilation of these manuscripts explains the intersection between the concept of workplace psychological distress and personal, social, and workplace environmental factors of PWB. Also, this chapter provides recommendations for future research and occupational health practice.

Discussion of the Findings

In the first manuscript, an extensive review of existing literature was used to define the concept of WPD. The conceptualization of WPD offers a foundational understanding for OHNs and employers by identifying the defining attributes, antecedents, and consequences. University administrators have a responsibility to mitigate the risks related to WPD by promoting a workplace environment focused on worker well-being and employee satisfaction. While PWB is not exactly contrary to psychological distress, both are under mental health: a positive dimension corresponds to PWB, and psychological distress stands in a negative dimension (Franzen et al., 2021). However, some variables (i.e., marital status, work status, and education) positively correlated with PWB were negatively correlated with psychological distress (Winefield et al., 2012). Several workplace factors, such as job control, social support, and working conditions, have also been associated with psychological distress (Cadieux & Marchand, 2014; Vogazianos et al., 2019).

In the second manuscript, a descriptive cross-sectional, correlational study design was used to examine the PWB and personal, social, and workplace environmental factors influencing PWB in university staff. This study adopted Ryff's (1989) PWB model, which addresses six

domains of PWB: Autonomy, Environmental Mastery, Purpose in Life, Personal Growth, Positive Relationships, and Self-Acceptance, with the assumption that personal, social, and workplace environmental factors influence the PWB of university staff. This study found that the total PWB level scored by university staff was in the upper quartile at University A ($M = 214.25$, $SD = 34.02$) and University B ($M = 208.78$, $SD = 37.97$) out of the maximum level, 252. University staff at both universities scored highest on Personal Growth, Positive Relations with Others, and Purpose in Life subscales.

In the investigation of significant factors influencing the PWB of university staff, perceived mental health status was the strongest predictor of total PWB level in the university staff. Previous studies reported that high job demands, insufficient resources, and poor management of university staff have consistently been associated with increased mental health issues (i.e., stress, anxiety, depression, and other mental health difficulties; Brewster et al., 2021; Kaiser et al., 2021). Thus, appropriate occupational health management promoting PWB and mental health needs to be established. Race was also significantly associated with PWB; Whites reported lower levels of total PWB, while African-Americans showed higher PWB levels. Among social factors, the perceived social support of family, friends, and significant others was positively associated with higher scores of total PWB, similar to previous studies that reported positive correlation between social support and PWB (Adyani et al., 2019; Saputra & Palupi, 2020; Sargolzaei et al., 2018). However, social support from friends was the only significant predictor for total PWB in the university staff. Regarding workplace environmental factors, this study discovered having a leadership position and perceived work factors (i.e., job control, psychological demands, and physical demands) were significantly associated with total PWB. Specifically, high levels of job control, low levels of psychological demands, and low levels of

physical demands were associated with higher levels of total PWB. Furthermore, physical demand was a significant predictor of the total PWB in the university staff. Psychological demand was also important in predicting the total PWB at a significance level, $p < .10$. This study's results were consistent with previous studies that reported that individual PWB was affected by workplace environmental factors. (Akerboom & Maes, 2006; Chandrasekar, 2011; Mudrak et al., 2018; Schütte et al., 2014; Winefield et al., 2014).

Conclusions and Implications

Through the development of two manuscripts, this dissertation contributed to the literature a concept analysis of workplace psychological distress and an expanded understanding of university staff PWB and related personal, social, and workplace environmental factors. The most notable predictor of PWB in the university staff was perceived mental health status. Also, it is important to pay attention to significant associations between their PWB and social factors, with the strongest predictor of PWB being the social support of friends. Lastly, the PWB of university staff was significantly associated with leadership positions, job control, psychological demands, and physical demands, and physical demand was the most significant predictor of PWB.

These findings have the following nursing implications:

1. Occupational health nurses and other stakeholders (e.g., administrators, faculty, and staff) in university settings can utilize the approach of the current study in assessing the level of PWB and related personal, social, and workplace environmental factors.
2. The results of this dissertation highlight the need to track and monitor the following factors (e.g., perceived mental health status, social support – friends, and work factors – physical demands, and the PWB) in university staff, even considering different

racial groups. The information can be used to develop appropriate intervention programs to promote PWB.

3. In developing a PWB promotion program and evaluating the effectiveness of the developed program, careful assessment of personal factors, social factors, workplace environmental factors, and each subscale of PWB should be prioritized; the investigation of their relationships is also necessary

Recommendations for Further Study

Based on the findings of this dissertation, the following recommendations are made for future research:

1. Future studies should further explore the influence of personal, social, and workplace environmental factors on the PWB of university staff in a different methodology, such as a qualitative or mixed-methods design.
2. Future research will need to include samples from a more inclusive demographic population and multiple geographical university settings.
3. Future research should also incorporate a longitudinal approach to assess the effectiveness of any intervention strategies to alleviate psychological distress and promote psychological well-being.
4. The investigation of the relationships between PWB of university staff, their work engagement and productivity, and student retention and outcomes

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APPENDIX A

TEXAS WOMAN'S UNIVERSITY

INSTITUTIONAL REVIEW BOARD APPROVAL



Texas Woman's University
Institutional Review Board (IRB)

irb@twu.edu

<https://www.twu.edu/institutional-review-board-irb/>

November 23, 2021

Dawn Mopkins
Nursing - Denton

Re: Exempt - IRB-FY2022-51 Psychological Well-being and Related Personal, Social, and Workplace Environmental Factors in Employees in a University Setting

Dear Dawn Mopkins,

The above referenced study has been reviewed by the TWU IRB - Denton operating under FWA00000178 and was determined to be exempt on November 23, 2021. If you are using a signed informed consent form, the approved form has been stamped by the IRB and uploaded to the Attachments tab under the Study Details section. This stamped version of the consent must be used when enrolling subjects in your study.

Note that any modifications to this study must be submitted for IRB review prior to their implementation, including the submission of any agency approval letters, changes in research personnel, and any changes in study procedures or instruments. Additionally, the IRB must be notified immediately of any adverse events or unanticipated problems. All modification requests, incident reports, and requests to close the file must be submitted through Cayuse.

On January 31, 2023, this approval will expire and the study must be renewed or closed. A reminder will be sent 45 days prior to this date.

If you have any questions or need additional information, please email your IRB analyst at irb@twu.edu or refer to the [IRB website](#).

Sincerely,

TWU IRB - Denton

APPENDIX B

UNIVERSITY OF HOUSTON

INSTITUTIONAL REVIEW BOARD AUTHORIZATION AGREEMENT



Institutional Review Board (IRB) Authorization Agreement – EXEMPT protocol

Name of Institution Providing IRB (Exempt) Review: Texas Women's University (TWU)

IRB Registration #: IRB0000506

Federalwide Assurance#: FWA00000178

Name of Organization Relying on the Designated IRB office: University of Houston

IRB Registration #: IRB00010706

Federalwide Assurance#: FWA00005994

The Officials signing below agree that the University of Houston may rely on the designated Texas Women's University IRB for review and continuing oversight of its human subjects research described below:

This agreement is limited to the following specific protocol(s):

Name of Research Project: IRB-FY2022-51 Psychological Well-being and Related Personal, Social and Workplace Environmental Factors in Employees in a University Setting

UH External Protocol ID: STUDY00003412: Psychological Well-Being of Employees in a University Setting

Funding Agency: Unfunded

Primary Awardee: N/A

Award Number: N/A

Texas Women's University Principal Investigator: Dawn Mopkins

Texas Women's University Point of Contact: Sandy N. Owens Phone 940-898-3378

Email: irb@twu.edu

University of Houston Principal Investigator: Dawn Mopkins

University of Houston Point of Contact: Kirstin M. Holzschuh, MPH, CIP Phone 713-743-9740

Email: kmholzsc@central.uh.edu

The review performed by the Texas Women's University Exempt Reviewer will meet the human subject protection requirements of the University of Houston. The IRB office at Texas Women's University will follow standard procedures for reporting applicable findings and actions to appropriate officials at the University of Houston. Relevant information regarding the exempt review will be provided upon request. The University of Houston remains responsible for

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH

ensuring compliance with the IRB office's determinations. For investigation/reporting purposes, the University of Houston and the Texas Women's University mutually agree to inform the other institution in the event of any of the following:

- unanticipated problems involving risks to subjects or others;
- suspensions or terminations of the research;
- serious or continuing noncompliance; or
- research misconduct

Any additional institutional or related facility-specific (e.g. hospital or medical center, safety) approvals are the responsibility of the University of Houston and will be made available to the Texas Women's University IRB office. Any financial relationships related to the research found by the University of Houston to be conflicts of interest requiring management under institutional policy must be disclosed to the Texas Women's University IRB office prior to final approval of the protocol.

This document must be kept on file by both parties.

Signature of Signatory Official of Texas Women's University:

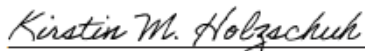


Date: January 26, 2022

Holly Hansen-Thomas, PhD

Vice Provost for Research & Innovation and Dean of the Graduate School

Signature of Signatory Official of the University of Houston:



Date: 1/27/2022

Kirstin M. Holzschuh, MPH, CIP for

Claudia Neuhauser, Ph.D.

Associate Vice Chancellor for Research and Technology Transfer, UH

System Associate Vice President for Research and Technology Transfer, UH

cmneuhau@central.uh.edu

(713) 743-6961

APPENDIX C

ONLINE SURVEY

Demographics							
What is your gender?	Male [Value=1]	Female [Value=2]	Transgender [Value=3]	Non-binary/non-conforming [Value=4]	Non-binary/non-conforming [Value=4]		
What is your age?	Open Value						
What is your race?	American Indian or Alaskan Native [Value=1]	Asian [Value=2]	Black or African-American [Value=3]	Native Hawaiian or Other Pacific Islander [Value=4]	White [Value=5]	Other (please specify) [Value=6]	
What is your ethnicity?	Hispanic [Value=1]	Non-Hispanic [Value=2]					
Is English your primary language spoken?	Yes [Value=1]	No [Value=2]					
In general, would you say your PHYSICAL health is:	Poor [Value=1]	Fair [Value=2]	Good [Value=3]	Very good [Value=4]	Excellent [Value=5]		
In general, would you say your MENTAL health is:	Poor [Value=1]	Fair [Value=2]	Good [Value=3]	Very good [Value=4]	Excellent [Value=5]		
Do you have any comorbidities or pre-existing medical conditions (e.g., hypertension, diabetes, hyperlipidemia, kidney disease, asthma, joint disease, etc.)?	Yes [Value=1]	No [Value=2]					

What is your marital status?	Never married [Value=1]	Married [Value=2]	Separated [Value=3]	Divorced [Value=4]	Widowed [Value=5]	Living with a good friend or partner [Value=6]	
Do you have dependents in the home?	Yes [Value=1]	No [Value=2]					
What is the highest level of education that you have completed?	Less than High School [Value=1]	High School Diploma or General Education Development (GED) [Value=2]	College/University [Value=3]	Graduate School [Value=4]			
Where are you currently employed?	Texas Woman's University [Value=1]	University of Houston [Value=2]					
What is your employment category?	Exempt (e.g., salaried employee) [Value=1]	Non-Exempt (e.g., hourly employee that is eligible to receive overtime pay) [Value=2]					
What is your current employment status?	Full-time [Value=1]	Part-time [Value=2]					
How long have you been employed by the university (years)?	Open value						
Are you in a leadership position?	Yes [Value=1]	No [Value=2]					
Multidimensional Scale of Perceived Social Support (MSPSS)							
	Very strongly disagree	Strongly disagree	Mildly disagree	Neutral	Mildly agree	Strongly agree	Very strongly agree
There is a special person who is	1	2	3	4	5	6	7

around when I am in need.							
There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
My family really tries to help me.	1	2	3	4	5	6	7
I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
My friends really try to help me.	1	2	3	4	5	6	7
I can count on my friends when things go wrong.	1	2	3	4	5	6	7
I can talk about my problems with my family.	1	2	3	4	5	6	7
I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
My family is willing to help me make decisions.	1	2	3	4	5	6	7
I can talk about my problems with my friends.	1	2	3	4	5	6	7

Work Factors Survey							
	Almost never			Very often			
I have the freedom to influence my own work pace.	1	2	3	4			
I can personally decide when to take breaks from work.	1	2	3	4			
I have a personal say in the amount of work I have to do.	1	2	3	4			
I have general freedom to decide and plan my own work day.	1	2	3	4			
Is your job characterized by a great amount of time pressure?	1	2	3	4			
Is your job generally stressful and hurried?	1	2	3	4			
Do you think that you have too much to do?	1	2	3	4			
Is your work piling up?	1	2	3	4			
I have to work with my hands above shoulder height.	1	2	3	4			
I work at the upper limit of my physical capacity.	1	2	3	4			
My job requires me to work in painful positions.	1	2	3	4			

In my work I am exposed to a cold and humid environment.	1	2	3	4			
Ryff's Psychological Well-being Scale							
	Strongly disagree	Somewhat disagree	A little disagree	Neither agree nor disagree	A little agree	Somewhat agree	Strongly agree
"I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people."	1	2	3	4	5	6	7
"For me, life has been a continuous process of learning, changing, and growth."	1	2	3	4	5	6	7
"In general, I feel I am in charge of the situation in which I live."	1	2	3	4	5	6	7
"People would describe me as a giving person, willing to share my time with others."	1	2	3	4	5	6	7
"I am not interested in activities that will expand my horizons."	1	2	3	4	5	6	7
"I enjoy making plans for the future and working to make them a reality."	1	2	3	4	5	6	7

"Most people see me as loving and affectionate."	1	2	3	4	5	6	7
"In many ways I feel disappointed about my achievements in life."	1	2	3	4	5	6	7
"I live life one day at a time and don't really think about the future."	1	2	3	4	5	6	7
"I tend to worry about what other people think of me."	1	2	3	4	5	6	7
"When I look at the story of my life, I am pleased with how things have turned out."	1	2	3	4	5	6	7
"I have difficulty arranging my life in a way that is satisfying to me."	1	2	3	4	5	6	7
"My decisions are not usually influenced by what everyone else is doing."	1	2	3	4	5	6	7
"I gave up trying to make big improvements or changes in my life a long time ago."	1	2	3	4	5	6	7

"The demands of everyday life often get me down."	1	2	3	4	5	6	7
"I have not experienced many warm and trusting relationships with others."	1	2	3	4	5	6	7
"I think it is important to have new experiences that challenge how you think about yourself and the world."	1	2	3	4	5	6	7
"Maintaining close relationships has been difficult and frustrating for me."	1	2	3	4	5	6	7
"My attitude about myself is probably not as positive as most people feel about themselves."	1	2	3	4	5	6	7
"I have a sense of direction and purpose in life."	1	2	3	4	5	6	7
"I judge myself by what I think is important, not by the values of what others think is important."	1	2	3	4	5	6	7

"In general, I feel confident and positive about myself."	1	2	3	4	5	6	7
"I have been able to build a living environment and a lifestyle for myself that is much to my liking."	1	2	3	4	5	6	7
"I tend to be influenced by people with strong opinions."	1	2	3	4	5	6	7
"I do not enjoy being in new situations that require me to change my old familiar ways of doing things."	1	2	3	4	5	6	7
"I do not fit very well with the people and the community around me."	1	2	3	4	5	6	7
"I know that I can trust my friends, and they know they can trust me."	1	2	3	4	5	6	7
"When I think about it, I haven't really improved much as a person over the years."	1	2	3	4	5	6	7

"Some people wander aimlessly through life, but I am not one of them."	1	2	3	4	5	6	7
"I often feel lonely because I have few close friends with whom to share my concerns."	1	2	3	4	5	6	7
"When I compare myself to friends and acquaintances, it makes me feel good about who I am."	1	2	3	4	5	6	7
"I don't have a good sense of what it is I'm trying to accomplish in life."	1	2	3	4	5	6	7
"I sometimes feel as if I've done all there is to do in life."	1	2	3	4	5	6	7
"I feel like many of the people I know have gotten more out of life than I have."	1	2	3	4	5	6	7
"I have confidence in my opinions, even if they are contrary to the general consensus."	1	2	3	4	5	6	7

"I am quite good at managing the many responsibilities of my daily life."	1	2	3	4	5	6	7
"I have the sense that I have developed a lot as a person over time."	1	2	3	4	5	6	7
"I enjoy personal and mutual conversations with family members and friends."	1	2	3	4	5	6	7
"My daily activities often seem trivial and unimportant to me."	1	2	3	4	5	6	7
"I like most parts of my personality."	1	2	3	4	5	6	7
"It's difficult for me to voice my own opinions on controversial matters."	1	2	3	4	5	6	7
"I often feel overwhelmed by my responsibilities"	1	2	3	4	5	6	7

Appendix C. An 82-item PsychData survey containing four parts (i.e., demographics,

Multidimensional Scale of Perceived Social Support, Work Factors Survey, Ryff's PWB Scale).

APPENDIX D

SURVEY RECRUITMENT EMAIL

Volunteers Needed: Seeking University Staff for Research Study on Psychological Well-Being

What?

We are conducting a research study to examining the level of psychological well-being and related personal, social, and workplace environmental factors of staff in a university setting. Volunteer participants will be given an electronic survey that is expected to take less than 20 minutes to complete.

Eligibility

- Staff members employed by the university
- Current employment status is regular full-time or regular part-time
- Age 18 years or older
- Participation is voluntary

Compensation

To thank you for completing the survey, participants will have the opportunity to voluntarily enter a grand prize drawing for a **\$50 Amazon gift card!!** There will be 20 grand prize drawings to increase your chances of winning.

CLICK THE LINK BELOW TO BEGIN THE SURVEY:

[Psychological Well-Being Questionnaire](#)

There is a potential risk of loss of confidentiality in all email, downloading, electronic meetings, and internet transactions. For questions, please contact: Dawn Mopkins at dmopkins@twu.edu or Mikyoung Lee at MLee27@twu.edu

Thank you in advance for your participation.

Regards,
Dawn Mopkins, MPH, MSN, RN, COHN-S
Texas Woman's University
Ph.D. Candidate - Nursing Science

APPENDIX E

SURVEY RECRUITMENT FLYER

University Staff Volunteers Needed for Research Study on Psychological Well-Being

What?

We are conducting a research study to examining the level of psychological well-being and related personal, social, and workplace environmental factors of staff in a university setting. Volunteer participants will be given an electronic survey that is expected to take less than 20 minutes to complete.



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- Current employment status is regular full-time or regular part-time
- Age 18 years or older
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