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**Exploring the Relationship between Nurse Supervisor's Servant Leadership Behavior
and Nursing Employee's Self-Assessment of Engagement and Burnout in Nigeria**

by

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Submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in Health Sciences

School of Health and Medical Sciences

Seton Hall University

2023

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APPROVAL FOR SUCCESSFUL DEFENSE

Michael Otuwurunne has successfully defended and made the required modifications to the text of the doctoral dissertation for the Ph.D. in Health Sciences during the Spring 2023

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ACKNOWLEDGEMENT

As I express my thanks to God for His blessings. I wish to express my heartfelt gratitude to all those who identified with me all these years at Seton Hall University. May almighty God bless you abundantly. I thank the dissertation committee Dr. Deborah A. DeLuca, M.S., J.D. (Chair) Dr. Terrence F. Cahill, Ed.D., FACHE and Dr. Kathleen Nagle, Ph.D., CCC-SLP with most profound respect for their encouragement, patience, and kindness. I want to say thank you to Dr. Olubukola Olatosi BDS, MPH, FMCDS. May God continue to blees you.

DEDICATION

I dedicate this work to my parents. Though you are no longer with us, your memory is always
with us.

Anastasia Ijeoma Egbufor 1950 – 2014

Michael Otuwurunne Egbufor January 1933 to 2015

Abstract

Burnout is a problem among workers in Nigeria, especially among nurses (Ozumba, & Alabere, 2019). This study examined whether there was a significant relationship between the employee perception of the servant leadership behaviors of the nurse supervisor and the employee's self-rating of burnout: exhaustion and disengagement, and servant leadership behaviors of the nurse supervisor, and engagement: vigor, dedication, and absorption. Exhaustion refers to an intensive physical, affective, and cognitive strain while disengagement refers to the distancing of oneself from one's work, and experiencing negative attitudes toward the work object, work content, or one's work in general (Demerouti et al., 2001). Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly, and one has difficulties with detaching oneself from work (Schaufeli & Bakker, 2003).

The study also examined if employees at an institution that explicitly endorses the principles of servant leadership behaviors of the supervisor would score higher in vigor, dedication, and absorption and score lower on exhaustion and disengagement. The study took place at three university teaching hospitals in Nigeria: Lagos University Teaching Hospital (172 participants), University of Nigeria Teaching Hospital Enugu (172 participants), and University of Port-Harcourt Teaching Hospital (154 participants). There were 498 participants in the study. Most of the study participants were female (463, 93.0%), while the rest were male (35, 7.0%). This reflected the national average concerning gender of the nursing population in Nigeria. The

study utilized already validated psychometric instruments: Linden's Servant Leadership Scale 7, to measure the servant leadership behaviors of the supervisor. The Utrecht Work Engagement Scale was used to measure employee work engagement, and the Oldenburg Burnout Inventory was used to measure the burnout of the employees.

This study found a small significant negative correlation between the employee perception of the servant leadership scale and employee burnout: exhaustion and disengagement. It also found a small positive significant relationship between employee perception of the servant leadership behaviors of the supervisor and employee engagement: vigor, dedication, and absorption among the study participants. However, more servant leadership behaviors did not result in less burnout or more work engagement.

Keywords: Servant Leadership, Burnout, Exhaustion, Disengagement,
Work Engagement, Vigor, Dedication, Absorption.

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Chapter 1

Introduction

As a negative psychological state, burnout receives much attention across workplaces and research studies. The World Health Organization (WHO) has classified burnout as an occupational phenomenon and not as a disease. According to the WHO, burnout refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life (ICD-11, 2019).

There is no generally agreed definition of burnout. However, the two most cited definitions of burnout are: burnout as a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach et al., 2019), and burnout as a psychological syndrome of exhaustion and disengagement from work (Bakker & Demerouti, 2017). This study has adopted the definition of burnout composed of the two primary components of disengagement and exhaustion, because it is more inclusive than exhaustion as operationalized in the original Maslach burnout inventory, which emphasizes only the affective aspect of burnout.

A physically burnt-out person feels exhausted or suffers from chronic fatigue. Emotionally, they experience low motivation, a sense of self-doubt and failure, helplessness, defeat, detachment from the workplace, etc. Behaviorally, burnt-out individuals isolate themselves and withdraw from peers. They vent their frustrations on others, evade responsibilities, and procrastinate, thereby leading to decreased productivity (University of Tokyo Reports Findings in Nursing Administration, (2020). Burnout also creates a sense of reduced empathy. Further, according to Demerouti and Bakker (2008), an employee who experiences burnout stops being productive and, more importantly, can negatively influence the

other employees who work with them (Moodie et al., 2014). Burnout can thus negatively impact the health of both workers and organizations. If these issues are ignored, the organization can suffer from a serious decline in quality and resultant financial problems. Further, burnout has both emotional and financial consequences for people and institutions. Moss (2019) cited the findings of Stanford researchers, who investigated how workplace burnout affects health costs and mortality in the United States. Stanford researchers found that burnout led to a loss of nearly \$190 billion and 120,000 deaths each year.

One of the major components of burnout is disengagement. Disengagement is characterized by distancing oneself from one's work and experiencing negative attitudes towards workplace tasks, service recipients, or work in general (Scanlan & Still, 2019). As part of disengagement from work, employees withdraw and defend themselves cognitively, emotionally, and behaviorally while performing their roles (Kahn, 1990, p. 694). An example of a disengagement is when an employee begins to feel disinterested in completing a project, because of the thought that whatever the employee does, it either does not offer them satisfaction or only brings more work, they do not like to stay at their desk. The employee gradually begins to feel a permanent sense of disengagement. Over time, this could lead to a cynical attitude. This continual sense of a lack of desire to do things well begins affecting performance. Another aspect of burnout is exhaustion, which is characterized by the depletion of energy. It results from enduring physical, affective, or cognitive strain (Bakker & Demerouti, 2017).

Burnout crises are very troubling because employee engagement is the bedrock of an organization's success. Gallup polls (2022) on the State of the Global Workplace said that engaged employees are involved in, enthusiastic about, and committed to their work. Such engagement is intrinsically related to achieving productivity, profitability, and customer

engagement outcomes essential for financial viability (Merisalo, 2016). Ironically, such engaged and committed workers might easily experience burnout.

Most often, it is passion-driven and caregiving roles such as those of doctors and nurses that are most susceptible to burnout, and the consequences can mean life or death; suicide rates among caregivers are dramatically higher than that of the public. A study compared the national incidence of suicide among nurses with that of physicians and the general population in the United States. Davis, et al. (2021) identified, during 2007 to 2018, a total of 2374 suicides among nurses [1912 women (80.5%); mean (SD) age: 52.8 (11.8) years], 857 suicides among physicians [723 men (84.4%); mean (SD) age: 59.8 (15.3) years], and 156,141 suicides among the general population [121,483 men (77.8%); mean (SD) age: 53.1 (14.7) years]. Overall, suicides were found to be more common among nurses compared to the general population. The study also suggested that, in the United States, the risk of suicide, as compared to the general population, was significantly greater for nurses than for physicians (Davis et al., 2021). Apart from these findings, the study also detected higher levels of use of antidepressants, benzodiazepines, barbiturates, and opiates in cases of suicides among clinicians compared to the general population.

As indicated above, health care is one of the major industries experiencing the burnout crisis in the United States. Furthermore, according to Davis (2018), in a recent Gallup study of nearly 7,500 full-time employees in the United States, 28% of millennials claimed to feel frequent or constant burnout at work, compared to 21% of workers in older generations. An additional 45% of millennial workers say they sometimes feel burned out at work. Furthermore, research on the effects of burnout on physicians, Medscape's National Report 2019 finds little progress being made, despite greater awareness of physician burnout, depression, and suicide.

According to this report, a survey of over 15,000 physicians from 29 specialties in the United States revealed the following facts: (a) 46% said that they are burned out or depressed or both, (b) 53% said they use exercise to manage burnout, (c) 24% said that they use alcohol, and (d) 5% said they use marijuana or prescription drugs (Medscape Report, 2019). Another study that surveyed 257 registered nurses working in hospitals in the United States found that: (a) 98% nurses feel their work is physically and mentally demanding, (b) 85% of the nursing jobs make nurses feel fatigued on the whole, (c) 63% nurses report that their work has caused burnout, (d) 44% nurses worry that patient care will suffer because they are so tired, and (e) 41% have considered changing hospitals during the past year due to burnout (“Kronos Releases Results of New Survey,” 2017).

However, very little is known about burnout and its effects on health-care providers in low-income regions and countries, especially in sub-Saharan Africa and Nigeria. Africa has the largest health-worker shortages in the world. Sub-Saharan Africa has fewer than 1.3 physicians per 10,000 persons, whereas the UK has 27.4 and the United States has 26.7 physicians per 10,000 persons, respectively (Kirigia, 2013). Sub-Saharan Africa has 3% of the world’s health workforce and 25% of the world’s disease burden. The migration and shortage of nurses is so high that, according to Garcia-Dia (2022), the International Council of Nurses has raised ethical concerns over rich countries recruiting foreign nurses from poor countries, especially in sub-Saharan Africa, during the Omicron COVID-19 surge. In most Sub-Saharan African countries, local emergency centers are often understaffed, poorly equipped, and overcrowded (Rajan & Engelbrecht, 2018). The region is characterized by high patient workloads and limited resources. More than 30% of physicians trained within the region migrate to high-income countries. Migration trends among sub-Saharan African-trained physicians have shown a steady rise during

2002 to 2011 (Tankwanchi et al., 2021). In a study by Duvivier et al. (2019), which examined the past 10 years of migration of physicians from Sub-Saharan Africa, the outflow of African-educated physicians to the United States was found to have risen from 10,684 in 2005 to 13,584 in 2015. This constituted a 27.1% increase. African-educated physicians represented 5.9% of all international medical graduates in the United States workforce in 2015.

A literature review (Owuor et al., 2020), that considered studies from sub-Saharan Africa identified the prevalence of burnout among nurses using standard measurement tools. The study was conducted using critical appraisal, data extraction, and data synthesis methods. According to the review, using the Maslach Burnout Inventory (seven studies, $n = 1923$), the prevalence of emotional exhaustion was found to be 66%, depersonalization stood at 60% and low personal achievement at 49%. The overall prevalence of burnout among studies that utilized the Professional Quality of Life Scale (three studies, $n = 337$) was 87%. One study reported a prevalence of 51%, using the Copenhagen Burnout Inventory (CBI) ($n = 237$). Yet another study reported a prevalence of 33%, using an unspecified measuring tool ($n = 46$) Based on the data gathered from the above-mentioned review of literature, their study concluded that, regardless of the measuring tool used, nurses in sub-Saharan Africa experienced high levels of burnout in all its dimensions.

The problem is very severe in Nigeria. At the maiden annual lecture of the Nigeria Medical Association (NMA) titled “Brain Drain and Medical Tourism: The Twin Evils in Nigeria’s Health System,” NMA President Professor Innocent Ujah observed that Nigeria has a doctor-to-population ratio of about 1:4000-5000, which falls far short of the WHO recommended doctor-to-population ratio of 1:600. According to Onah,(2022)Nigeria is still grappling with disturbingly poor health indices. Nzor, (2022) said that the West African Health Sector Unions

Network (WAHSUN) has decried high rate of continued travel to foreign countries to seek medical care by affluent Nigerians. The union said that Nigerians spend an average of \$1billion yearly on medical tourism, adding that doctors are leaving Nigeria for the United Kingdom, United States of America, and others due to poor healthcare facilities and appalling conditions of service in Nigeria. As a result of such migration and medical tourism, though the remaining medical personnel in Nigeria are overstretched, they still exhibit positive employee attitudes, such as organizational citizenship behavior and workplace commitment. This strain leads to occupational burnout of health workers and deterioration of their ability to provide quality service to their patients (Ogunbamila, 2018). Not only are the medical personnel overstretched, but they also face exhaustion due to lack of adequate support and resources amid high demand for their services. Such exhaustion eventually leads to total disengagement from work.

Problem Statement

Burnout is an occupational hazard in Nigeria. It affects employees' work engagement. Lasebikan, & Oyetunde., (2012), identified a high level of burnout among nurses in a Nigeria general hospital. 39.1% of the respondents in emotional exhaustion. 29.2% in depersonalization and 40.0% in reduced personal accomplishment. However, Adewa, & Agboola, (2020) there is an inverse relationship between job burnout and employee satisfaction which makes them perform below expectations. The study concluded that since job burnout inhibits performance and manifests significantly in their service delivery, employers should put policies in place to mitigate it.

According to another study on the relationship between work engagement and burnout among health-care workers in Nigeria, a higher rate of work engagement is significantly related to a reduced level of occupational burnout among health-care workers (Ogunbamila, 2018).

According to extant literature, leadership is one of the factors determining employee engagement, disengagement, and burnout. Therefore, it is necessary to adopt a leadership style that addresses these challenges of burnout and engagement, especially in the health-care industry. Some findings in existing literature suggest that good leadership leads to positive outcomes in institutions (Morison, 2018). This study, therefore, examined the relationship between burnout and engagement through the lens of a specific leadership behavior, with specific reference to the nursing profession in Nigeria. Though there are several types of leadership behavior, the present study focused on servant leadership behaviors.

Leadership is “a process whereby an individual influences a group of individuals to achieve a common goal” (Northouse, 2010). In a comprehensive literature review on “Leadership Styles and Outcome Patterns for the Nursing Workforce and Work Environment,” Cummings et al. (2018) provided robust findings to support the view that relationship-focused leadership practices are linked to better outcomes for nurses, especially their personal health and well-being. They also observed that, when task-focused leadership styles were compared to relationally focused leadership styles, relationship-focused styles frequently and overwhelmingly led to better engagement. Further, leadership roles invariably need to focus on enhancing employee engagement. According to Wiles et al. (2022), prioritizing employee engagement is paramount for optimizing outcomes, because employee engagement spurs consumer engagement, employee improvement, and performance. Employee progress and performance will be poor if the employees are not engaged. Again, consumers cannot be engaged without first engaging the employees and providers. Given the above context, there is a need for a leadership style that can bring people together to reduce employee disengagement and burnout in the new global healthcare environment. Trastek et al. (2014) proposed servant leadership as the best

model for health-care organizations, because it focuses on the strength of the team, on developing trust, and fulfilling the needs of patients. Tropello and DeFazio (2014) also advocated servant leadership as the leadership style needed in today's health-care environment.

They argued that servant leadership approaches could inspire employees at all levels to embrace a new era of complexity and constant change while striving for excellence. However, these propositions have not been empirically tested. There is a major lack of empirical studies exploring the relationship between servant leadership and employee engagement and burnout in the health-care sector. Outdated leadership strategies will simply fail to bring about the transformations that health-care organizations require today. Hence, both within the academia and across industries, there is a call for quantitative investigations into servant leadership (Northouse, 2010; Yukl, 2012). This study, therefore, intended to positively contribute towards filling the research gaps in this area, about both theory and practice, in the crucial context of the nursing profession in Nigeria.

Purpose of the Study

Leadership plays a fundamental role in enhancing work engagement and decreasing burnout among workers (Stanislaw, 2018). The purpose of this study is to explore the relationship between the servant leadership behaviors of the supervisor as a resource for the employees and the employee self-rating scores of burnouts and work engagement, within the context of the jobs demands and resources model, in the nursing profession in Nigeria. This research adds to the knowledge in the field because quantitative research on servant leadership, employee engagement, and burnout in industries, especially in the health-care industry in Nigeria, is very scarce.

Research Questions

Although literature in the field has recorded an increasing number of empirical investigations on servant leadership behaviors, employee engagement, and burnout, there is still much to be discovered regarding these constructs. This study, therefore, aims to contribute to the field of servant leadership, employee engagement, and employee burnout, through the empirical exploration of servant leadership behaviors in Nigeria, with reference to Nigeria's nursing profession. It seeks to quantifiably examine the relationships among the perceived servant leadership behavior of supervisors, employees' self-rating engagement, and burnout, with reference to the nursing profession in Nigeria, through the following research questions:

RQ1: Is there a significant relationship between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of exhaustion?

RQ2: Is there a significant relationship between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of disengagement?

RQ3: Is there a significant relationship between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of vigor?

RQ4: Is there a significant relationship between the employee's perceptions of the servant leadership behaviors of the supervisor and the employee's self-rating of dedication?

RQ5: Is there a significant relationship between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of absorption?

RQ6: Would institutions that explicitly endorse the servant leadership behaviors of the supervisor score significantly higher on vigor, dedication, and absorption and score significantly lower on exhaustion and disengagement, compared to institutions that do not explicitly endorse the servant leadership behaviors of the supervisor?

Hypotheses

The following are the hypotheses (null and alternative) for each research question:

RQ1: Is there a significant relationship between the employee's perceptions of the servant leadership behaviors of the supervisor and the employee's self-rating of exhaustion?

HO: There is no significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of exhaustion.

HA: There is a significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of exhaustion.

RQ2: Is there a significant relationship between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of disengagement?

HO: There is no significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of disengagement.

HA: There is a significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of disengagement.

RQ3: Is there a significant relationship between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of vigor?

HO: There is no significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of vigor.

HA: There is a significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of vigor.

RQ4: Is there a significant relationship between the employee's perceptions of the servant leadership behaviors of the supervisor and the employee's self-rating of dedication?

HO: There is no significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of dedication.

HA: There is a significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of dedication.

RQ5: Is there a significant relationship between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of absorption?

HO: There is no significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of absorption.

HA: There is a significant correlation between the employee's perception of the servant leadership behaviors of the supervisor and the employee's self-rating of absorption.

RQ6: Would institutions that explicitly endorse the servant leadership behaviors of the supervisor score significantly higher on vigor, dedication, and absorption and significantly lower on exhaustion and disengagement, compared to institutions that do not explicitly endorse the servant leadership behaviors of the supervisor?

HO: Institutions that explicitly endorse the servant leadership behaviors of the supervisor would not score significantly higher on servant leadership, vigor, dedication, and absorption or significantly lower on exhaustion and disengagement, compared to institutions that do not explicitly endorse the servant leadership behaviors of the supervisor.

HA: Institutions that explicitly endorse the servant leadership behaviors of the supervisor would score significantly higher on servant leadership, vigor, dedication, and absorption or significantly lower on exhaustion and disengagement, compared to institutions that do not explicitly endorse the servant leadership behaviors of the supervisor.

Significance of the Study

To improve employee and organizational performance, it is essential to reduce burnout levels and to better understand the concept of employee engagement. Positive leadership is essential to doing this, and servant leadership behavior can be one of the drivers of employee engagement (Kaur, 2017). However, much of the literature relating to servant leadership primarily seeks to provide definitions that identify traits and constructs. The significance of this research study lies in its application of these traits and constructs to a practical situation in a hospital setting in Nigeria. It seeks to empirically demonstrate that there is a relationship between nursing employees who work for nurse leaders demonstrating servant leadership behavior having higher levels of engagement and lower levels of burnout.

Objective of the Study

The significance of servant leadership behavior as a job resource has not yet been explored empirically. There are many unknowns in the interrelationships among the supervisor as a servant leader and employee work engagement and burnout, especially in Nigeria's nursing profession. Hence, this study aims to fill this gap in research, by exploring servant leadership behavior as a job resource for nursing employees and its relationship to self-perceived burnout and engagement among nurses in Nigeria. Given the fact that burnout is a serious workplace problem, adversely affecting employees, organizations, and society at large, such a study that explores a relationship between perceived servant leadership behaviors and employees' self-perceived burnout and engagement among nurses in Nigeria is extremely relevant.

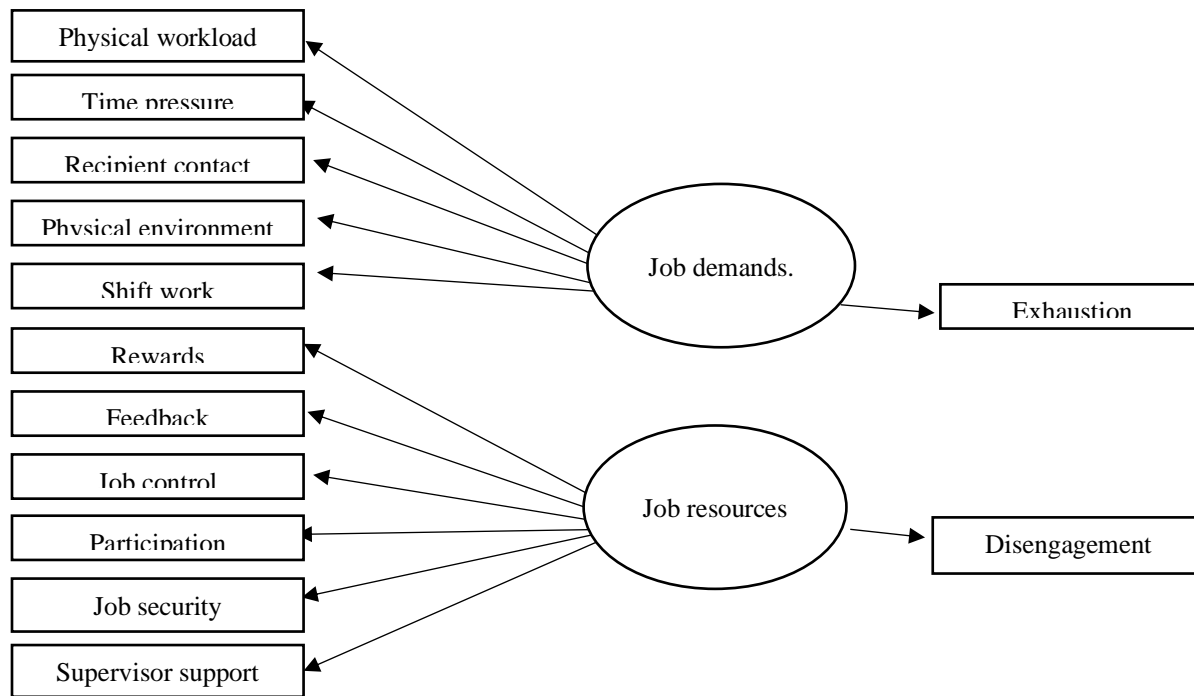
Theoretical Background: Job Demands-Resources Model for Burnout

This study utilized the job demands-resources (JD-R) model as the basis of the conceptual framework for exploring the relationship between employee perception of servant

leadership behaviors of the supervisor or manager and employee self-assessment of engagement and burnout, among nurses in Nigeria.

Figure 1

Theoretical Background: Job Demands-Resources Model for Burnout (JD-R Model)



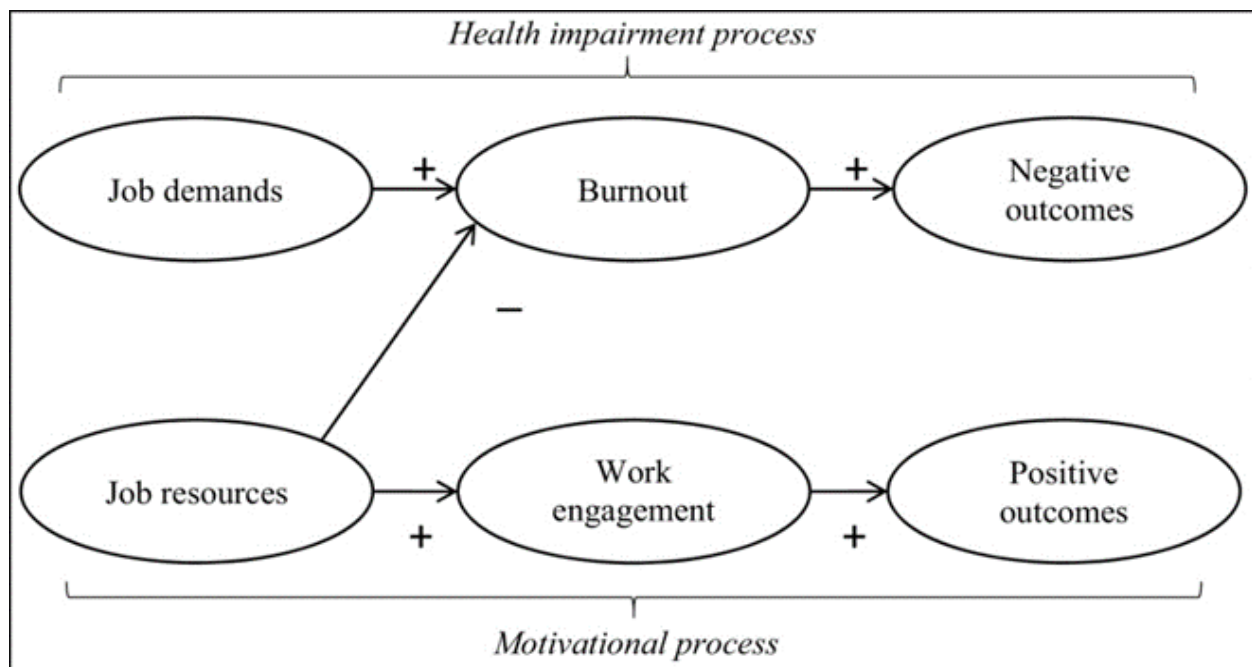
Note: Figure 1 shows that Job Demands are composed of different variables that can lead to Exhaustion. It also shows that variables that are composed of Job Resources can lead to Work Disengagement. Adapted from The Job Demands-Resources Model of Burnout by Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). *The Journal of applied psychology*, 86(3), 499–512.

The JD-R model proposes that working conditions can be categorized into two broad categories: job demands and job resources. These working conditions are differentially related to specific outcomes (Demerouti et al., 2001). The JD-R model predicts that high or unfavorable job demands are primarily and positively related to exhaustion, whereas lack of job resources is primarily and negatively related to disengagement from work.

In this context, it would be useful to look at the Job Demands and Resources Model. The model was initially introduced to understand burnout. Burnout was defined as a syndrome of chronic exhaustion, a cynical, negative attitude regarding work, and reduced professional efficacy, that could occur in any job (Maslach & Zimbardo, 1982). After some years, the model was complemented with the addition of work engagement, a positive, fulfilling psychological state, characterized by vigor, dedication, and absorption (Schaufeli, 2017).

Figure 2

Job Demands Model



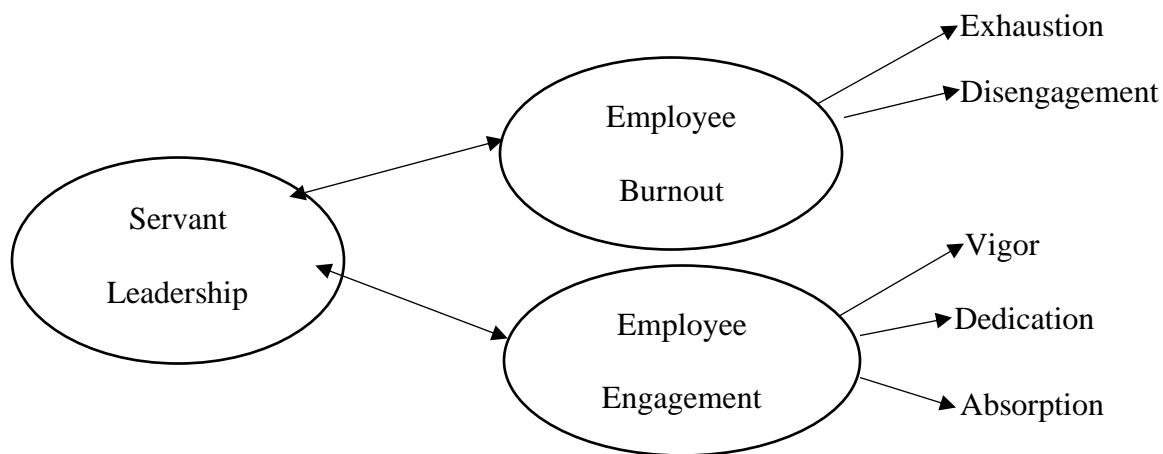
Note: Figure 2 is the process of burnout and work engagement, showing the negative and positive outcomes. Adapted from Applying the Job Demands-Resources model: A ‘how to’ guide to measuring and tackling work engagement and burnout, by Wilmar B. Schaufeli, Organizational Dynamics, Volume 46, Issue 2, 2017, Pages 120-132, ISSN 0090-2616, <https://doi.org/10.1016/j.orgdyn.2017.04.008>. (<https://www.sciencedirect.com/science/article/pii/S0090261617300876>). © 2017 Elsevier. Reprinted with permission.

Excessive job demands and lack of job resources leads to burnout and other negative outcomes while only job resources can lead to work engagement and other positive outcomes. The results of research based on this model showed that work overload, emotional job demands, physical job demands, and work-home conflict are all risk factors for job burnout, particularly exhaustion and cynicism. Furthermore, researchers also found that the undesirable impact of job demands on burnout can be alleviated by job resources, such as job autonomy, social support, the quality of the relationship with the supervisor, and performance feedback.

Finally, the conceptual framework developed and used for this study is explained in the diagram that follows. (Bakker, Demerouti, & Euwema, 2005).

Figure 3

Conceptual Framework



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Note: Figure 3 is the conceptual model for study. The figure represents the relationship between servant leadership and employee burnout which is comprised of exhaustion and work disengagement. It also shows the relationship between servant leadership and employee engagement which is comprised of vigor, dedication, and absorption.

Chapter 2

Review of Relevant Literature

Work Disengagement, Work Engagement, and Burnout

In this review of literature, I will begin by considering the concepts of “work engagement,” and “burnout.” There are several approaches to understanding these concepts. However, the two major approaches are drawn from the works of Kahn (1990) and Demerouti et al. (2001). From the conceptual model above, burnout is the negative end, while work engagement is the positive end. Work engagement consists of a state of high energy (rather than exhaustion), strong involvement (rather than cynicism), and a sense of efficacy (rather than inefficacy) (Palmer & Prado-Inzerillo, 2017).

According to Kahn (1990), individuals’ experiences of themselves and their work-contexts influences moments of personal engagement and disengagement. His qualitative study is credited with pioneering essential research on the psychological conditions of personal engagement and disengagement at work. Basically, he argued that people ask themselves three fundamental questions about each role: (a) how meaningful is it for me to bring myself into this performance, (b) how safe is it to do so, and (c) how available am I to do so? Based on an analysis of the interviews he conducted, Kahn generated the determinants for these three psychological conditions. Further, Kahn (1990) defined work disengagement in terms of withdrawal and defense of the preferred self. He suggested:

Personal engagement is the simultaneous employment and expression of a person’s preferred self in task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active, full role performances. ...

Personal disengagement, conversely, is the simultaneous withdrawal and defense of a

person's preferred self in behaviors that promote a lack of connections, physical, cognitive, and emotional absence, and passive, incomplete role performances. To withdraw preferred dimension is to remove personal, internal energies from physical, cognitive, and emotional labors (Kahn, 1990, p.694).

This means that employees can consciously decide to engage or disengage, based on their assessment of the situation concerning the psychological conditions of meaningfulness, safety, and availability. He went on to say that upon an unfavorable evaluation, people are likely to uncouple themselves from their work roles, simultaneously withdrawing and defending themselves cognitively, emotionally, and behaviorally during role performance.

The results from May et al.'s (2004) study, which also used Kahn's (1990) interpretation of work engagement and disengagement, revealed that psychological meaningfulness and safety were positively linked to employees' investment in their work roles. Job enrichment and work role fit were positively associated with psychological meaningfulness. Supportive supervisor and rewarding co-worker relations had positive correlations with feelings of psychological safety. Availability was positively related to resources and negatively related to participation in outside activities. In another work that used Kahn's (1990) theory of disengagement, Rastogi et al. (2018) noted that a lack of psychological conditions of meaningfulness, safety, and availability causes employees to disengage. He viewed psychological meaningfulness as a sense of return on investments of self in role performances. Psychological safety is the ability to employ self without fear of negative consequences to self. On the other hand, psychological availability is about having physical, emotional, and psychological resources necessary for investing self in role performances.

Another prominent approach to work disengagement treats disengagement as a component of burnout. Demerouti et al. (2001) define burnout as a response, drawn out over time, to chronic interpersonal stressors in the workplace. This explanation of disengagement as a component of burnout is rooted in the JD-R model of burnout. Here, job demands are primarily related to the exhaustion component of burnout, whereas lack of job resources is primarily related to disengagement. Demerouti et al. (2001) define disengagement as a distancing of oneself from one's work and experiencing negative attitudes toward the work object, work content, or one's work, in general. This understanding of engagement and burnout is the basis of the Oldenburg Burnout Inventory (OLBI). It sees burnout as a long-term consequence of adverse working conditions, characterized by the simultaneous experience of the symptoms of exhaustion and disengagement from one's job (Demerouti et al., 2001).

Building on Demerouti et al.'s approach, empirical studies by Bakker et al. (2004) established that job demands lead to exhaustion, and a lack of job resources results in work disengagement. Further, other extant literature has also contended that work disengagement results from a lack of job resources, such as feedback, reward, job control, participation, job security, and supervisor support. Such studies have defined job resources as those physical, psychological, social, or organizational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce the associated physiological and psychological costs of job demands; (c) stimulate personal growth and development (Demerouti et al., 2001, p. 501). In explaining the psychological relationships among these job resources and engagement, Demerouti et al. (2001) noted that job control would be negatively associated with work disengagement, while loss of job control, on the contrary, would be positively related to work disengagement. Job security would be negatively related to work disengagement, whereas loss of

job security would be positively associated with work disengagement. Job complexity would be negatively related to work disengagement, whereas lack of job complexity would be positively associated with work disengagement. Organizational support would be negatively related to work disengagement, while lack of organizational support would be positively associated with work disengagement.

Demerouti et al. (2001) also observed that certain personal qualities such as resilience and equanimity play substantial roles in how different individuals manage situations, leading to disengagement and burnout. Equanimity is seen to moderate the positive relationship between loss of job resources and work disengagement. This relationship tends to be stronger for individuals low on equanimity, compared to individuals high on equanimity. Resilience too is seen to moderate the positive relationship between loss of job resources and work disengagement. Furthermore, personal and social resources substitute for the loss of job resources. Such a substitution may not work if the employee is also low on personal and social resources, leading the employee to disengage completely. Such a state of disconnection is likely to lead to negative outcomes for the well-being of both the organization and the individuals. Disengaged employees are known to exhibit poor performance, diminishing commitment, high turnover, as well as deviant and counterproductive behaviors (Demerouti et al., 2001).

Thus, to sum up Demerouti et al.'s approach, social support moderates the positive relationship between loss of job resources and disengagement at work. This relationship tends to be stronger for individuals low on social support than for individuals high on social support. Work disengagement has a negative association with subjective well-being but is positively associated with counterproductive behavior. Further, work disengagement has a negative association with organizational commitment and a positive association with turnover intentions.

The Burnout-Engagement Continuum

Burnout was initially seen as a psychological syndrome that involved a prolonged response to chronic emotional and interpersonal stressors on the job (Maslach & Zimbardo, 1982). Citing Freudenberger (1985), who is generally credited with coining the term burnout, Rholetter (2021) observed that Herbert Freudenberger used the analogy of a burned-out building to refer to the burnout syndrome. Rholetter noted that his clients, most of whom were high achievers, had lost their optimism, passion for life, and a sense of purpose. He went on to emphasize that Freudenberger's work and other early studies linked burnout to the caring professions, such as those of nurses, schoolteachers, legal-aid workers, social workers, and clergy. However, according to Golonka & Bozena (2021), those susceptible to burnout syndrome have expanded to include groups as varied as bankers, managers, homemakers, students, and other populations exposed to chronic stress. Burnout has since been commonly regarded as a job-induced syndrome involving emotional exhaustion, depersonalization/ cynicism, and a sense of reduced personal accomplishment. Among the three components of burnout, emotional exhaustion has been considered to constitute the core of the burnout syndrome (Schaufeli, 2017). According to Sullivan et al. (2022), nurse burnout is associated with medical conditions such as headaches, sleep disturbances, irritability, hypertension, anxiety, depression, and even acute heart disease. Other consequences include reduced performance and dissatisfaction at work (Prata & Pereira, 2011).

On the other hand, Maslach and Leiter (2010) represented another school of thought about burnout. They opined that people's psychological relationships to their jobs are to be understood as a continuum. The negative experience on the continuum is known as burnout, while the positive experience is called engagement. This continuum has three interrelated

dimensions: exhaustion-energy, cynicism-involvement, and inefficacy-efficacy Maslach et al., 2005). The exhaustion component represents the basic individual strain dimension of burnout. It refers to feelings of being overstretched and depleted of one's emotional and physical resources. The cynicism or depersonalization component represents the interpersonal context dimension of burnout and refers to a negative, callous, or excessively detached response to various aspects of the job. The component of inefficacy or reduced accomplishment represents the self-evaluation dimension of burnout. It arises due to feelings of incompetence and lack of achievement and productivity in work.

Antecedents of Work Disengagement

Work disengagement does not just happen suddenly. It has some antecedents. According to the JD-R model, lack of feedback, rewards, job control, job security, supervisor support, and participation in decision-making can be antecedents to disengagement. Job resources, especially job control, promote the positive development of work engagement (Mauno et al., 2007). The results of a study by Spence-Laschinger et al. (2009) indicated a positive relationship between empowerment and nurses' perceived fit in six areas of work life: workload, control, reward, community, fairness, and values. These six areas of work life explained 42% of the variance in work engagement. Further, DiNapoli et al. (2016) provided new evidence of the positive relationship between empowerment and perceived engagement among clinical nurses.

Lack of job resources can manifest itself in varied forms. For instance, lack of supervisor support can manifest itself as bullying. Bullying is another cause of disengagement. However, according to Longo (2013) workplace bullying among nurses is underreported due to its highly sensitive and personal nature. Longo (2013) described bullying as a silent epidemic in nursing. This epidemic is made worse by the wall of silence that protects the perpetrator, enabling the

bullying behaviors to continue. Victims of bullying hesitate to report the problem when they fear reprisal or lack of support. This is especially true when the bully is an immediate supervisor, nurse manager, another nurse, physician, or patient. Bullying exposure among nurses is an important determinant of disengagement and nurses' intent to leave their current positions. Both personal experience of bullying ($\beta = 0.49$; $p < 0.001$) and witnessing bullying ($\beta = 0.17$; $p < 0.01$) were directly related to disengagement (Arnetz et al., 2018).

Another salient antecedent of work disengagement is moral disengagement. Among nurses, this includes displacement of responsibility, diffusion of responsibility, and distortion of consequences (Christian & Ellis, 2014). When individuals view their behavior as being dictated by a boss or being pressured by a group, they may displace responsibility for the act, by imagining that the boss is truly at fault or that no one should be held responsible for the destructive behavior of a group. Moral disengagement tends to be positively related to organizational deviance behaviors, turnover intentions, and work disengagement.

Another antecedent of work disengagement is the prevalence of deviant behavior in the workplace, which is one of the most pressing problems facing managers. Deviance at work refers to voluntary behavior, violates organizational norms, and threatens the well-being of the organization or its members. Deviant behaviors such as theft, vandalism, absenteeism, and leaving early or arriving late to work threaten the well-being of an organization and cost billions annually. Given the importance of the problem as an antecedent of work disengagement, researchers have sought to identify the primary drivers of deviant behavior at work (Christian & Ellis, 2014).

Further, leaders, managers, or supervisors play vital roles in mitigating or exacerbating work disengagement. Nurse leaders play a pivotal role in creating a work environment that

promotes employee engagement and mitigates work disengagement. According to Aslam et al. (2018), work disengagement increases because of managers' personal biases, unfairness, above-the-rule practices, negative political influence, work overload, and a lack of accountability in the workplace. The results of this study also revealed a positive association among organizational injustice, organizational politics, work overload, and work disengagement. The study also found that organizational injustice is the strongest predictor of work disengagement.

Medical Personnel, Environment, and Burnout

The Accreditation Council for Graduate Medical Education (ACGME) included job setting as a serious source of burnout in its 2016-2017 annual report entitled "Igniting Innovation." (ACGME., 2017) emphasized that graduate medical training programs should educate medical residents on fatigue management, because fatigue that is not well managed can lead to stress and burnout. This makes it clear that burnout and stress are key factors in mitigating positive outcomes during training. It is important to note that the same holds true for nursing. Coping strategies are important for nurses in overcoming a stressful environment (Fesun, 2019). However, some studies attribute burnout to a shortage of nurses in the United States. According to the American Association of Colleges of Nursing (2022), the United States is expected to experience a shortage of registered nurses, which will intensify as Baby Boomers age and the need for health care grows. This problem is compounded by the fact that nursing schools across the country are struggling to expand capacity for meeting the rising demand for care, given the national move toward health-care reform. The Association's document has gone on to say that nursing turnover has contributed substantially to the current shortage, with nursing schools unable to meet the demands of the health-care market in the United States. The seriousness of burnout among medical personnel was confirmed by Moukarzel et al.'s (2019)

study, wherein burnout prevalence among medical personnel stood at 34.6%. Here, medical professionals were seen to be significantly more affected by burnout than their colleagues. According to the study, nearly one emergency department physician out of two had a burnout (50.7%). Valero-Chillerón et al. (2019) carried out an observational, descriptive, and cross-sectional study on nursing students' burnout. They found that depersonalization increased as the academic year progressed ($p = 0.027$). The most stressful factors were helplessness and uncertainty ($m = 3.61$, $SD = 0.345$) and confusion about medication ($m = 2.50$, $SD = 0.754$). The female sub-sample showed higher stress levels due to multiple factors, such as lack of competence ($p = 0.001$) and having to give bad news ($p = 0.01$).

Further, Alba (2015) found that the overall prevalence of burnout among nursing professionals stood at 66.6%. The study also said that the prevalence of emotional exhaustion was 58.5% , the prevalence of depersonalization was 59%, and the prevalence of low personal accomplishment was 65%. It was also found that lack of training is related to greater emotional exhaustion ($p < .004$) and reduced personal accomplishment ($p < .025$). When stress and fatigue take over a nurse's ability to prioritize self-care and recovery time, patient safety and quality are greatly affected and compromised (Waddill-Goad, 2016). A good work environment is necessary for effective and efficient work by nurses. Nurses experience burnout due to tight schedules, long shifts, mental and physical exhaustion, heavy workload, conflicts, bullying, challenging patients, rapid technological advances, and lack of control. Nursing is more than a job. It is a profession that attracts those who value compassion, want to make a difference in other people's lives, and want to do greater good in the world. While the profession provides endless options of practice, settings, and flexibility, place of work and some other factors were also included in an integrative review study. In this integrative review study, Marques Paiva et al. (2019) identified

excessive workloads and professional dissatisfaction as the main factors responsible for burnout syndrome among nurses. In addition, work settings such as emergency units can also be environments breeding burnout among nurses. Moukarzel et al. (2019) performed a cross-sectional survey across three emergency departments in various hospitals, to assess the prevalence of burnout among all the emergency department staff and to identify factors associated with burnout. The multivariate analysis of covariance showed that job strain and a low mental component score were the two main factors independently associated with burnout ($p < 0.05$). This confirms that emergency department professionals constitute a group vulnerable to burnout. This is because heavy workload, long working hours, poor work environment, lack of social support, and difficult interactions with patients and families — are all associated with the work environment of emergency department professionals.

The working conditions of health-system pharmacists can also be associated with burnout. In a study by Durham et al. (2018), of the 371 survey responses received, 329 were complete and included in the final analysis. Overall, 175 study participants (53.2%) reported scores indicating a high degree of burnout on at least 1 subscale of the MBI-HSS. Twenty-eight respondents (8.5%) had scores indicating burnout on all 3 subscales. Average scores were 22.9, 6.2, and 36.3 for feelings of emotional exhaustion, depersonalization, and reduced personal accomplishment, respectively. This shows that almost half of the health-system pharmacists assessed identified themselves as being at risk for burnout. Pharmacists are also prone to professional burnout like other health-care professionals, due to some common and profession-specific factors. Pharmacists work in a tightly regulated profession. A continual focus on regulatory compliance, excessive documentation, depersonalization at work, and incongruities

between skills and actual day-to-day tasks make pharmacists especially prone to some degree of professional burnout during their careers.

Challenging work conditions of hemodialysis health professionals can also be associated with burnout. Dutra et al. (2018), in their quantitative, descriptive, cross-sectional, and prevalence study on hemodialysis health professionals, found that they are considerably vulnerable to the burnout syndrome.

Further, Rushton et al. (2015) studied burnout among inpatient oncology nurses. This quantitative descriptive study used questionnaires to describe perceptions of burnout. The inpatient oncology nurses reported a moderate level of perceived burnout. In addition, this nursing population perceived that such burnout negatively impacted the care they provided. Factors such as poor nurse-patient ratios as well as skipped or shortened lunches or breaks increased the probability of burnout among nurses. They also perceived that burnout could be prevented when adequate resources, collaboration, teamwork, and the support of family and friends are available (Russell, 2016).

In another cross-sectional online survey using the Maslach Burnout Inventory with 200 radiation therapists, Singh et al. (2017) found that radiation therapists had a high mean (\pm SD) burnout score for emotional exhaustion (38.5 ± 8.2), depersonalization (17.5 ± 4.7), and personal achievement ($30.5.3 \pm 4.3$), compared to health workers in other studies. The radiation therapists identified high workload, staff shortages, interpersonal conflict, and technology as key sources of stress in their work environment.

When the work environment in the United States changed on account of the reforms effected by the affordable health-care law, Bridgeman et al. (2018) of the RAND Corporation carried out a study on the changes influencing the health-care system in the United States. This

not-for-profit institution is dedicated to improving policy and decision-making within the American Medical Association. They conducted a survey to identify factors influencing physicians' professional satisfaction. They found that the quality of care and the use of electronic health records were key factors related to burnout. Barriers to payment for services served as major sources of professional dissatisfaction. The usability, time constraints, influence of technology on the provider-patient relationship, influence on job fulfillment, and worsening quality of clinical documentation — attributed to the implementation of health-care systems have been cited as contributing to frustrations and burnout. The radical changes influencing the health-care system in the United States have further affected physicians' satisfaction.

Just as working conditions and environment can be factors that influence burnout, personal characteristics can also be sources of burnout. Burnout is a complex multidimensional dynamic, which develops over a long period of time. One of the personal characteristics that literature has identified as a source of burnout is moral distress. Moral distress occurs when one knows that something is ethically and morally wrong but feels powerless to correct it. Brown (2018) identified moral distress as a factor contributing to the development of depersonalization.

Burnout has many consequences for an employee. It is associated with the ill-being of an employee. Levine (2019) acknowledged that symptoms of burnout are associated with several types of professional dysfunction and an increased risk of psychiatric illness. According to Levine, there exists a strong association between burnout and clinical depression, a disorder associated with a high lifetime suicide risk. The study also observed that depression and burnout share several similarities, and though they share some overlapping symptoms, their presentations are not synonymous. Burnout affects only the work portion of a person's life, whereas depression is all-encompassing. Further, Cochran (2017) noted that burnout had impacted the nursing

workforce, resulting in increased costs related to turnover, absenteeism, and poor patient outcomes for health-care organizations. An appropriate response would be to associate burnout with turnover intention, absenteeism, poor patient outcomes, personal pain, job dysfunction, and patient harm, and to initiate a call for action. Here, the role of leadership becomes crucial.

Leadership

Scholars have defined the word ‘scholarship’ in different ways. In a seminal article following his review of leadership literature, Stogdill (1974) concluded that there are almost as many definitions of leadership as there are persons who have attempted to define the concept. Burns (1978) noted that it is not possible to even agree on the standards for measuring leadership. He went on to say that it is one of the most observed and least understood phenomena on earth. He proposed that leadership is an aspect of power but is also a vital and separate process. He defined leadership as the reciprocal process of mobilizing persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, to realize goals independently or mutually held by both leaders and followers. According to Bass (2008), leadership refers to the process of influencing others to pursue group goals. He also emphasized transformational leadership, attributing four major characteristics to it: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Northouse (2010) defined leadership as a process whereby an individual influences a group of individuals to achieve a common goal. Summerfield (2014) opined:

The definitions of leadership have three components: democratic, collegial, and enhancement. A democratic component conveys that the leader works to achieve a common goal, one that is jointly conceived or, at least, jointly agreed on. A collegial component emphasizes the notion that the leader influences rather than dictates

throughout the process, imparting a respectful and unifying approach. An enhancement component conveys that the results represent an improved current state (p. 208).

Greenleaf & Spears (2003) noted, “Leadership is going out ahead to show the way” (p. 28). In this definition of leadership, it can infer that leadership is available to everyone. Leadership, according to Greenleaf, can be practiced in the institution by anyone who has competence, values, and temperament for it, from the chair to the least skilled individual. He emphasized that in an institution, leadership is a more critical requirement for the chair and the top executive officers. However, when leadership is lacking from the chair and the executive, any individual can step up to fill the space. It also has morality implicitly attached to it. This morality is important to servant leadership. As per Greenleaf’s definition, one may not see it as one’s duty to lead when the chair and top executive officers lag in leadership, unless one feels a moral obligation.

Leadership Theories

There are numerous theories of leadership. Leadership is no longer simply described as an individual characteristic. Leadership has been depicted using various models such as dyadic, shared, relational, strategic, global, and complex social dynamic (Avolio, 2007). These perspectives suggest that for leaders to influence other individuals, groups of individuals, or organizational outcomes, they must possess many of the characteristics described by these theories.

Leadership is something all organizations care about. However, what most interests’ different organizations is not which leadership theory or model is right or wrong, but how to develop leaders and leadership as effectively and efficiently as possible (Day et al., 2014). A

fundamental issue in leadership research concerns factors that contribute to leaders' effectiveness in mobilizing and influencing their followers.

One of the key elements of leadership involves strategic planning. The Minnesota-based Mayo Clinic recognized the importance of strategic leadership. According to Peters et al. (2014), strategic leadership within the Mayo Clinic involves practice, education, and research. As in other leadership theories, the tactics, which supervisors and managers utilize to motivate their subordinates and to challenge them to perform to the best of their ability, lie at the heart of strategic leadership (Pierro et al., 2012). However, there are two major types of leadership: task-oriented leadership and relationship-oriented leadership.

If leaders prefer to lead by setting and enforcing tight schedules, they are termed as task-oriented. If leaders prioritize employees and try to accommodate employee needs, they are viewed as being more relationship-oriented (Jenkins, 2011). Task-oriented leadership is a transactional form of leadership, which focuses on driving performance by emphasizing deadlines, encouraging work demands, creating urgency of work, and insisting on high levels of work performance (Casimir & Ng, 2010). It is a leadership style wherein the leader expresses the roles of followers, focuses on goal achievement, and establishes well-defined patterns of communication. Relationship-oriented leadership, on the other hand, expresses the degree to which a leader shows concern and respect for followers, looks out for their welfare, and expresses appreciation and support (Bass, 1990). According to da Cruz et al. (2011), a leader's orientation toward a task or relationship represents the leader's motivational priorities.

There are many approaches to leadership. The effectiveness of each approach depends on the circumstances and other variables. Leaders motivated toward tasks are primarily concerned with reaching objectives, whereas leaders motivated by relationships are concerned with

developing close interpersonal relationships (Northouse, 2010). Some leaders are very task-oriented; they simply want to get things done. Others are very people-oriented; they want people to be happy. In addition, there are leaders who exhibit a combination of the two approaches. The key assumption is that leaders' characteristics, behaviors, and styles should not be automated, but need to be appropriate to the situations faced by the leader.

According to Mirvis (2012), the two distinct behavioral roles of leaders are transactional and relational. The transactional role defines an exchange of tangible and material resources, wherein the nature of the exchange is specified, and expectations about the duration of the relationship are short-term. The relational role involves unspecified obligations, the exchange of socio-emotional resources, and presupposes that those relationships have no specific objective and will be maintained long-term. These two distinct behavioral roles constitute the framework categorizing the array of leadership styles team leaders could adopt (Stogdill, 1969).

According to Tabernero et al. (2009), a key proposition of Bass' theory of transformational and transactional leadership is that transactional leaders ensure that expectations are met. Transactional leaders motivate their followers to fulfill their leaders' expectations, while transformational leaders motivate their followers to perform beyond what is expected of them. They went on to emphasize Bass' argument that every leader uses both transactional and transformational leadership to some extent, but the most effective leaders use the transformational leadership style more frequently than the transactional leadership style.

Breevaart et al. (2014) opined that daily contingent reward is positively related to followers' daily work engagement, after controlling for daily transformational leadership and daily active management by exception. They noted that transformational leadership contributes to followers' work engagement every day. They concluded that despite their lack of inspirational

appeal, leaders who use contingent rewards are also able to influence their followers' daily work engagement.

Tabernero et al. (2009) found that task-oriented leaders induced greater group efficacy and a more positive and less negative affective state among group members. However, relationship-oriented leaders did not bring significant differences concerning group processes. They found these results to be consistent in terms of the effect of the leadership style on performance. They observed that groups who perceived their leaders as being more task-oriented achieved higher levels of task accomplishment. The results also indicated that affective commitment was significantly and positively related to task-oriented leadership ($r = .38, p < .01$) than relationship-oriented leadership ($r = .40, p < .01$).

According to Giray & Güngör (2015), there is a positive relationship between task-oriented leadership style, relationship-oriented leadership style, and affective commitment. Their study suggests that organizations should pay attention to leaders' behaviors, because both task-oriented and relationship-oriented leadership behaviors have a role in job-related issues and organizational concepts. Leaders' and followers' levels of affective commitment and work engagements are interconnected. Jenkins (2011) found that task-oriented leader behavior is positively related to organizational citizens' behavior, over and above the effects of transformational leadership and leaders-member exchange. The incremental effects of task-oriented leader behaviors (i.e., monitoring, knowledge sharing, and providing feedback) played a significant role in individual employee initiative and organization-level individual initiative.

Dansereau et al. (1984) proposed that leadership cannot be executed in a vacuum. These researchers discussed various levels of leadership, which included persons, dyads, groups, and collectives. Here, individuals in organizational settings acting independently of one another are

said to be at the individual level of analysis. The dyad level involves two individuals, whose actions and successes are interdependent on a one-to-one basis. Group leadership level reflects two or more interdependent individuals interacting and influencing each other. The collectives' level of analysis comprises a clustering of individuals, groups, departments, organizations, or societies, wherein interdependency rests on shared expectations or hierarchical structure (Dansereau et al., 1984).

There is thus a relationship between types of leadership theories and interdependence among individuals or groups. Gardner et al. (2010) classified different leadership theories based on the interdependence among individuals or groups. They came up with 17 major categories of established leadership theories (e.g., servant leadership theory). It is important to mention that Gardner et al. (2010) and Dinh et al. (2014) placed servant leadership under ethical /moral leadership theories. The remaining theories in the group are authentic leadership theory, ethical leadership theory, and spiritual leadership theory. Under the ethical /moral leadership category, ethics and morals play major roles in leadership styles and goals. Leadership here means going out ahead to show the way. Anyone who has the competence, values, and temperament for leadership can practice it in an institution, from the chair to the least skilled individual (Greenleaf, 1977). In this definition of leadership, we can infer that leadership is available to everyone. At the heart of leadership theories lie the influencing tactics that supervisors and managers utilize to motivate their subordinates and challenge them to perform to their best (Pierro et al., 2012). There is no gainsaying the fact that successful leaders understand it is not enough to lead employees. They actively help them to succeed. To serve and to lead may be two separate entities, but a strong leader is able to master both: serving employees by leading them to practice the qualities that would merit trust. Gaining the trust of others comes from personal

character. A servant leader helps the team develop their skills and, in doing so, improves the entire organization.

Servant Leadership Theory. Greenleaf is regarded as a seminal figure in servant leadership circles. Greenleaf, (1977) said that the servant-leader is servant first, then leadership begins with the natural feeling that one wants to serve. Then a conscious choice brings one to aspire to lead. Greenleaf came to this insight from an essay by Hesse, (1956) entitled “A Journey to the East.” It is the story of a group of travelers served by a character called Leo; as the servant of the travelers, Leo did their menial chores, and uplifted them with his spirit and song. All went well until Leo disappeared one day. The travelers fell into disarray and could go no farther. The journey was over. Years later, one of the travelers saw Leo again. He was the revered head of the Order that had sponsored the journey. Leo, who had been their servant, was the titular head of the Order, a great and noble leader. From his impressions of this essay, Greenleaf conceptualized the servant as leader. In his book “The Servant as Leader,” Greenleaf stated:

“This story clearly says — the great leader is seen as a servant first and that simple fact is the key to his greatness. Leo was the leader all the time, but he was a servant first because that was what he was, deep down inside. Leadership was bestowed upon a man who was by nature a servant. It was something given, or assumed, that could be taken away. His servant nature was the real man, not bestowed, not assumed, and not to be taken away. He was a servant first” (Greenleaf, 1977, p. 31).

In the essay “The Servant as Leader,” Greenleaf coined the terms *servant-leader* and *servant leadership*. Greenleaf defined the servant-leader as follows:

The servant-leader is servant first. It begins with the natural feeling that one wants to serve. Then a conscious choice brings one to aspire to lead. That person is sharply

different from one who is leader first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions. The leader-first and the servant-first are two extreme types. Between them, there are shadings and blends that are part of the infinite variety of human nature. The difference manifests itself in the care taken by the servant first to make sure that other people's highest priority needs are being served. The best test, and difficult to administer, is: Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? And what is the effect on the least privileged in society? Will they benefit or at least not be further deprived? (Greenleaf, 1977, p. 36)

Greenleaf conceptualized servant leadership as a way of life rather than a management technique. If it is a way of life, a philosophy, how can it be empirically tested? Even Greenleaf admitted that servant leadership is unorthodox and would be difficult to operationalize and apply, as "it is meant to be neither a scholarly treatise nor a how-to-do-it manual" (Greenleaf, 1977, p. 49).

A servant-leader focuses primarily on the growth and well-being of people and the communities to which they belong. While traditional leadership generally involves the accumulation and exercise of power by the one at the "top of the pyramid," servant leadership is different. The servant-leader not only shares power but puts the needs of others first and helps people develop and perform as highly as possible. By involving them in decision-making (Patterson, 2003), seeking and valuing their inputs (Page & Wong, 2000), and supporting them in times of difficulty (van Dierendonck & Nuijten, 2011), servant leaders persuade employees to work to attain their goals by learning and exhibiting their true potential. In return, employees begin to regard the servant leaders as their benefactors and show a heightened vigor and

dedication to their work. As the employees are convinced that doing the work serves the purpose of their own growth, they feel more committed to the work. It is important to note that servant leaders use service to the employees, to influence them (Greenleaf, 1970). Servant leaders hold employees' goals paramount, unlike transactional and transformational leadership models, which regard organizational goals to be more important. Servant leaders are ready to extend learning opportunities to the employees, so they can learn and grow (Liden et al., 2008; Spears, 2010). Servant leadership plays an important role in improving commitment and engagement (Greenleaf, 1970).

According to Russell and Stone (2002), servant leadership is becoming an increasingly popular concept in the repertoire of leadership styles. While an intuitively attractive concept, it is systematically undefined and not yet supported by empirical research. To transform this servant leadership way of life into a leadership theory, several scholars have analyzed the concept of servant leadership from varied angles. They are also developing tools on how to measure this construct.

In analyzing the meanings and expectations of a servant leader, Keith (2008) observed that work should provide people opportunities to learn, grow, and fulfill their potential. When one's colleagues grow, the capacity of the organization grows. Developing colleagues includes a commitment to extensive on-the-job training and formal education, new assignments, and internal promotions. From the supervisor's perspective, this study provides empirical data for hospital administrations on how their caring and selfless behaviors can contribute to positive outcomes among employees.

According to van Dierendonck (2011) assessments, the servant leadership theory remains underdefined, with no consensus on its definition or theoretical framework. Scholars have

articulated Greenleaf's conceptualization of servant leadership using various definitions sourced from multiple works.

Laub (1999) formulated the operational definition of servant leadership. He interpreted servant leadership as an understanding and practice of leadership that places the good of those led over the leader's self-interest. He went on to say that servant leadership promotes the valuing and development of people, the building of community, the practice of authenticity, the provision of leadership for the good of those led, and the sharing of power and status for the common good of everyone, the total good of the organization and those served by the organization.

According to Patterson (2003), servant leaders serve with a focus on the followers, whereby the followers are the primary concern, and the organizational concerns are peripheral. She also opined that the servant leader construct includes virtues. She defined virtue as the good moral quality in a person, the general quality of goodness, or moral excellence.

Some servant leadership scholars reiterate that servant leaders make serving their employees a priority (Jumaa & Jasper, 2005). Leaders can serve their followers through coaching. Coaching involves showing an example of how to do something. Law and Aquilina (2013) demonstrated the positive impact of the health-care leadership coaching model. These structured coaching programs had a substantive impact on developing nurse ward managers' leadership skills. The outcomes of this model included: enhanced self-awareness, feelings of support, ability to make decisions, timeliness, and achievement of organizational and personal goals.

Key Characteristics of Servant Leadership. According to Luthans and Avolio (2003), Greenleaf placed going beyond one's self-interest as a core characteristic of servant leadership. They went on to say that although mentioned in other leadership theories, this characteristic has never been given the central position in any other leadership theory, as in servant leadership theory. The servant leader leads by creating opportunities within the organization to help other people grow. A servant leader is genuinely concerned with serving followers. Kent M. Keith, former CEO of the Greenleaf Center for Servant Leadership, observed:

Servant leadership means that "serving" is a fundamental, essential, continuing characteristic of a servant leader. If we are going to be servant leaders, we need to start by being servants. That must be our true nature. That must be who we really are (Keith, 2008).

Laub (1999) came up with six characteristics of servant leaders, which are explained below.

Figure 4: *Laub's Six Characteristics of Servant Leaders*

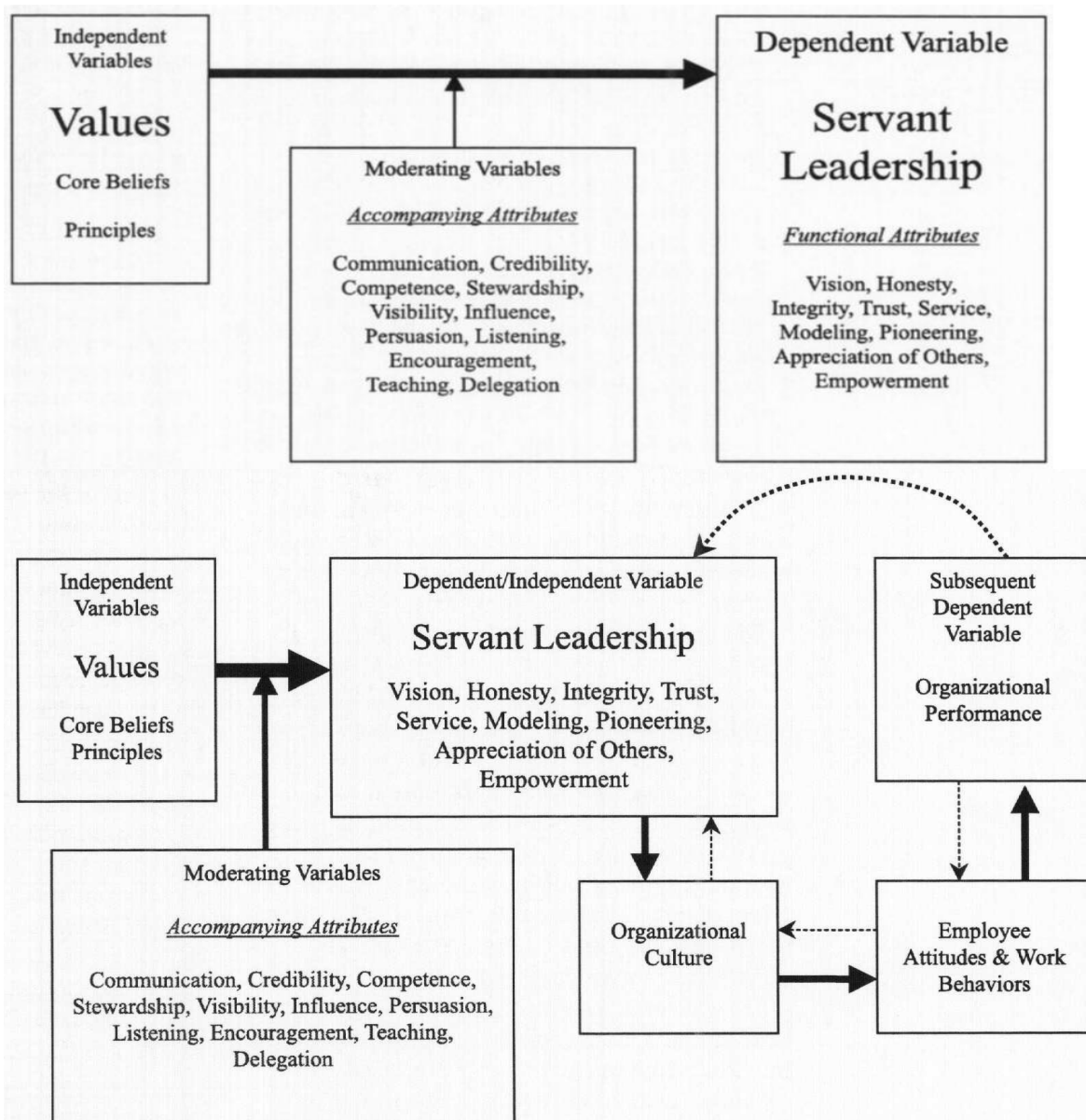
Values people	By believing in people By serving other's needs before their own, by being receptive and non-judgmental
Develops people	By providing opportunities for learning and growth By modeling appropriate behavior By building up others through encouragement and affirmation
Builds community	By building strong personal relationships By working collaboratively with others By valuing the differences of others
Displays authenticity	By being open and accountable to others By displaying a willingness to learn from others By maintaining integrity and trust
Provides leadership	By envisioning the future By taking initiative By clarifying goals
Shares leadership	By facilitating a shared vision By sharing power and releasing control By sharing status and promoting others

Note Figure 4 represents the variables and the components of the six variables in the servant leadership model adapted from Assessing the Servant Organization: Development of the Servant Organizational Leadership Assessment (SOLA) Instrument by Laub, J. A. (1999). Dissertation Abstracts International UMI No. 9921922.

In other research on servant leadership, Russell & Stone (2002) distinguished nine functional characteristics and 11 additional accompanying characteristics of servant leadership. The nine functional characteristics include: (a) vision, (b) honesty, (c) integrity, (d) trust, (e) service, (f) modeling, (g) pioneering, (h) appreciation of others, and (i) empowerment. The accompanying attributes of effective servant leadership are as follows: (a) communication, (b) credibility, (c) competence, (d) stewardship, (e) visibility, (f) influence, (g) persuasion, (h) listening, (i) encouragement, (j) teaching, and (k) delegation.

Figure 5

Russell and Stone Servant Leadership Model



Note: Figure 5 shows nine functional characteristics and 11 additional accompanying characteristics of servant leadership. Adapted from A review of servant leadership attributes: Developing a practical model by Russell, R. F., & Stone, A. G. (2002). *Leadership & Organization Development Journal*, 23(3), 145–157. <https://doi.org/10.1108/01437730210424> reprinted with permission.

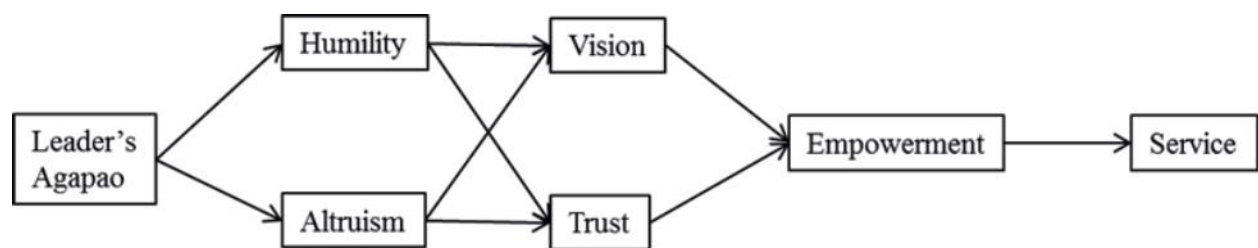
In other research, van Dierendonck (2011) analyzed the servant leadership model of Russell and Stone (2002), stating that it is one of the most extensive models in servant leadership theory. He however, the biggest problem with this model is the differentiation between functional attributes and accompanying attributes. It is unclear why certain attributes are allocated to a particular category.

Larry Spears, who was once the chairman of Greenleaf's Servant leadership Institute, identified 10 characteristics of servant leadership, which he considered central to the development of a servant leader. The characteristics are: (a) listening, (b) empathy, (c) healing, (d) awareness, (e) persuasion, (f) conceptualization, (g) foresight, (h) stewardship, (i) commitment, and (j) building community (Spears, 2010). These 10 characteristics are widely quoted as the true characteristics of servant leadership.

Yet another analysis and interpretation of servant leadership is reflected by the Patterson model.

Figure 6

Patterson Servant Leadership Model



Note: Figure 6 This model details how servant leadership construct work together beginning with Agapao love and ending with service. Adapted from Servant Leadership: A Theoretical Model, Kathleen Patterson, Servant Leadership Research Roundtable – August 2003, Regent University Reprinted with permission.

This model comprises of seven dimensions. Patterson's interpretation of servant leadership is all about virtues. According to her, virtues describe the elements of character that embody excellence. These are: (a) agape, love in a social or moral sense; (b) acting with humility, an ability to keep one's accomplishment and talent in perspective; (c) altruism, helping others selflessly just for the sake of helping them, which involves self-sacrifice, with no personal gain; (d) vision for followers, a mode of seeing or conceiving with unusual discernment or foresight; (e) trust, which involves confidence or reliance on other team members; (f) service; and (g) empowering followers (Patterson, 2003). In the practice of servant leadership, entrusting powers to others involves effective listening, making people feel significant, emphasizing teamwork, and valuing love and humility.

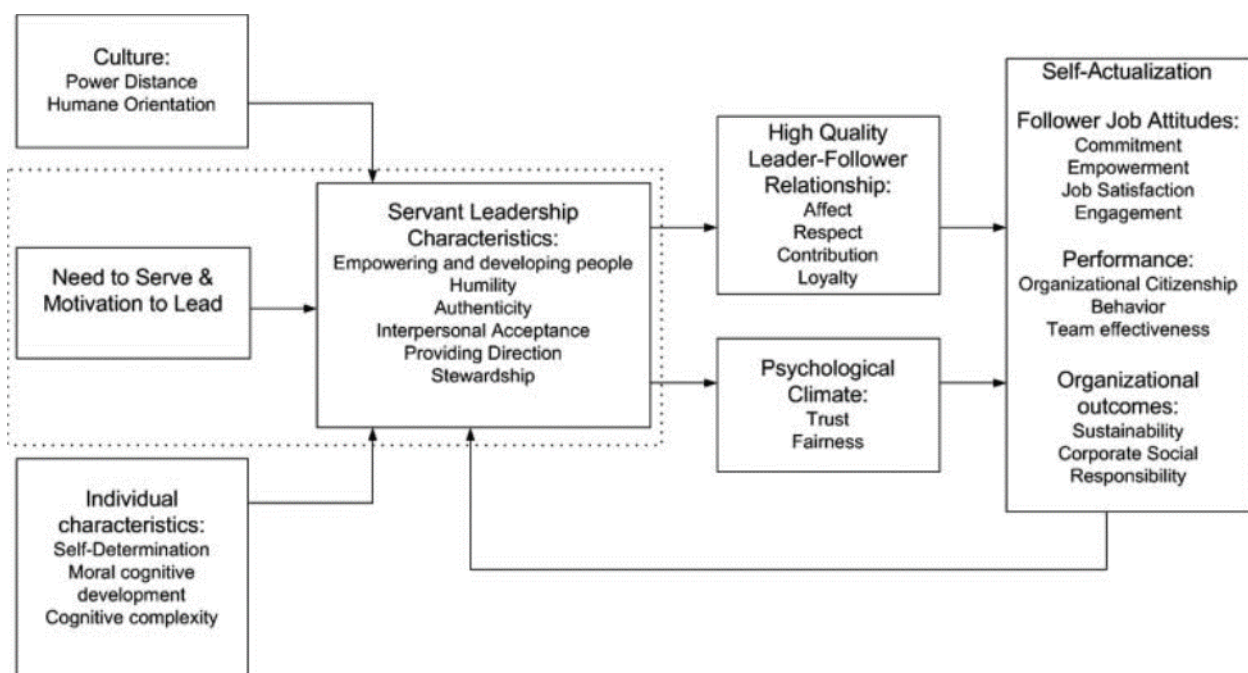
Liden et al. (2008) expressed dissatisfaction with the multidimensional structures of servant leadership offered in earlier literature. They reviewed available literature and developed a nine-dimensional measure of servant leadership: (a) emotional healing is the act of showing sensitivity to others' personal concerns; (b) creating value for the community means a conscious, genuine concern for helping the community; (c) conceptual skills means having knowledge of the organization and tasks at hand, to be in a position to assist other people; (d) empowering means encouraging others, as well as identifying and solving work-related tasks; (e) helping subordinates grow and succeed means showing concern for the career growth and development of others through support and mentoring; (f) putting subordinates first means servant leaders assist subordinates with problems they are facing with their assigned duties; (g) behaving ethically involves interacting openly, fairly, and honestly with others; (h) fostering relationships refers to the act of making a genuine effort to know, understand, and support others in the organization, with an emphasis on building long-term relationships with immediate followers;

and (i) servanthood refers to a way of being, marked by one's self-categorization and desire to be characterized by others, as someone who serves others first, even when self-sacrifice is required (Liden et al., 2008).

Another scholar who critiqued servant leadership, van Dierendonck (2011), used some characteristics or qualities to explain servant leadership.

Figure 7

van Dierendonck Model of Servant Leadership



Note: Figure 7 is the characteristics of servant leadership according to van Dierendonck. Adapted from *Servant Leadership: A Review and Synthesis* by van Dierendonck, D. (2011) *Journal of Management*, 37(4), 1228–1261. <https://doi.org/10.1177/0149206310380462>. Reprinted with permission.

The servant leadership characteristics are: (a) empowering and developing people gives followers a sense of personal power; (b) humility is the ability to put one's accomplishments and talents in a proper perspective; (c) authenticity involves expressing oneself in ways that are

consistent with inner thought and feeling; (d) interpersonal acceptance means the ability to understand and experience the feelings of others and where people are coming from; (e) providing direction that is based on followers' abilities, needs and input; and (f) stewardship as the willingness to take responsibility for larger institutions and service, instead of control and self-interest. According to Boone and Makhani (2012), servant leadership can be a highly effective style for motivating a group towards the achievement of organizational goals, if a leader possesses or can readily adopt the following attitudes: (a) believing that visioning is not everything, but is the beginning of everything; (b) listening is difficult work requiring a major investment of personal time and effort, and is worth every ounce of energy expended; (c) my job involves being a talent scout and committing to my staff's success; (d) it is good to give away my power; and (e) I am a community builder. This understanding and analysis of servant leadership thus emphasizes and promotes teamwork.

The above-mentioned idea of teamwork is very important in health-care organizations. When health caregivers collaborate with each other, they give their best. This involves working together as a team, wherein the individual's health is given optimal attention. Waterman (2011) proposed that servant leadership is the best leadership style for health care, suggesting that leaders can obtain the most from their staff, and deliver better services by embracing a more egalitarian model of management. Servant leadership promotes an egalitarian model of management. Waterman opined that the principles of servant leadership could help leaders frame their decisions with service and community in mind and focus on client care and the quality of services offered. This is because, if service is what leaders do, the community is whom they do it with, and vision is how the two concepts are brought together.

Servant leadership emphasizes the empowerment of the followers by the leadership. Some studies have sought to apply servant leadership theory to practical situations. As part of research on the empowerment aspect of servant leadership, Erkutlu & Chafra (2015) conducted a study entitled “The Effects of Empowerment, Role Identity, and Creative Role Identity on Servant Leadership and Employees’ Innovation Implementation Behavior.” In this study, servant leadership was positively and significantly correlated with empowerment and innovation implementation behavior.

Further, based on their quantitative study with a sample size of 247 supervisors, Chiniara & Bentein (2016) observed that servant leadership strongly predicted autonomy, competence, and relatedness. They inferred that the satisfaction of each of these three needs fuels employees distinctly, either resulting in enhanced task performance or greater organizational citizenship behaviors, or both. In another quantitative study, data captured from 263 employees of four information technology companies showed that servant leadership enhances work engagement (De Clercq et al., 2014). Some scholars also see significant relationships between servant leadership, organizational commitment, and job satisfaction. Irving and Berndt (2017) found that servant leadership positively correlated with organizational commitment (.60) and job satisfaction (.45). Servant leadership also has a positive relationship with person organizational fit (0.45) and leadership effectiveness (0.87). All correlations were statistically significant at the <0.001 level, exceeding the acceptable standard for a two-tailed significance of <0.01. The dependent variables evaluated in the study included job satisfaction, organizational commitment, person-organization fit, and leadership effectiveness.

Studies on servant leadership have also focused on athletics management, store management, and other topics. In a research study by Burton et al. (2017), servant leadership

behavior, as demonstrated by an athletics director, was positively associated with perceptions of the formation of an ethical climate in intercollegiate athletic departments ($\beta = 0.62, p = .001$). A positive relationship was also found between servant leadership, as demonstrated by the athletics director, and trust in the leader ($\beta = 0.84, p = .001$). In another study, Liden et al. (2014) found that the store manager's servant leadership was positively related to the service culture of the store (.54, $p .01$). Further, service culture was found to be positively correlated with store performance (.33, $p .05$). The results also showed that service culture was positively related to in-role performance (.35, $p .05$), creativity (.43, $p .05$), and customer service behaviors (.52, $p .01$), and negatively related to turnover intentions (.53, $p .01$).

To sum up, while the above-mentioned scholars have debated the characteristics associated with the concept of servant leadership, all of them agree upon the common point that servant leaders are oriented towards service. Service involves a willingness to support, listen to, and serve others. At this point, the servant leader must be real, standing back and giving employees an opportunity to show what they can do. The forgiveness factor in such a service implies that errors are part of the job, that mistakes can enhance learning, and that grudges are dysfunctional.

Servant Leadership Compared to Other Leadership Theories. After reviewing 293 articles, Meuser et al. (2016) concluded that there exist numerous leadership approaches/theories (e.g., servant leadership). They also place authentic leadership theory, ethical leadership theory, servant leadership theory, and spiritual leadership theory under the same thematic category of ethical/moral leadership theories.

According to Makaroff et al. (2014), servant leadership theory shares several characteristics with other leadership theories. It has much in common with charismatic leadership theory. Servant leaders and charismatic leaders both make use of charisma. Other leadership theories also share resemblances with servant leadership. For instance, authentic leadership concerns itself with being genuine, being transparent to others, being self-aware, and possessing moral standards and values in dealing with other people (Neider & Schriesheim, 2011). Again, ethical leadership has much to do with behavior: doing what is right, being fair, having integrity, sharing power, caring about the environment, and guiding others ethically by communicating about ethics, explaining ethical rules, and rewarding ethical behavior among subordinates (Kalshoven et al., 2011; Palanski & Yammarino, 2011). Just like servant leadership, spiritual leadership creates a vision that gives meaning and purpose to work. It also encompasses developing a culture of mutual care and concern among leaders and followers (Fry et al., 2011). In a study titled “Examining the Impact of Servant Leadership on Workplace Spirituality,” Kahn et al. (2015) showed that servant leadership had a positive and significant relationship with workplace spirituality.

Some studies have also been conducted on the similarities between servant leadership and transformational leadership. Sturm (2009) interpreted servant leadership as a form of transformational leadership. He described servant leadership as a visualized, evidence-based

example of a transformational leadership model. He further noted that servant leadership seeks to empower members of an organization to act as both servants and leaders, within a work environment of mutual respect, trust, and collaboration. The participants in the study included nurses, supervisors, administrators, and others. Analysis of their work life and opinions revealed that the servant leadership model could support personal and professional growth, empowering nurses to play a leadership role. This in turn would enhance collaboration, satisfaction, and job retention among nurses.

However, servant leadership is different from transformational leadership. According to Gardner et al. (2010), transformational leadership is often defined in terms of leader behaviors and effects on followers. It has four primary dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 2008).

Transformational leadership results in trust and respect for a leader, and it motivates followers to achieve more than what is expected. Looking at these definitions and implications, we can say that servant leadership theory and transformational leadership theory share much in common, yet servant leadership differs from transformational leadership. A transformational leader can be too instrumentalist, focusing too much on realizing their personal vision to the neglect of respecting the dignity of his followers. Transformational leadership is effective in communicating and convincing followers to achieve a vision, but without principled constraint and genuine participation in defining the communal good, its very power can result in exalting the leader and, in the extreme, supporting a tyrant. The most serious weakness of transformational leadership theory, and the danger of its practice, is that it can be used for immoral ends. We have had such tyrants in history (Gardner et al., 2010).

When comparing transformational leadership with servant leadership, we see that the two leadership theories share certain attributes. However, the servant leader is a servant first, seeking to treat each follower with dignity as a person and serve each person beneficially while building a community of participation and solidarity. His motivation is to create value for the group of which he is a member. This is the opposite of a leader who seeks his own power and wealth first. The servant leader listens with sincere openness and empathy and has the will to persist in the sincere vision. A case study demonstrates how these attributes helped develop servant leadership skills to support employee performance within a health-care system. Mertel and Brill (2015) offered a method to help leaders understand that anyone can enhance their success by practicing the principles of servant leadership. The servant leader would use proven transforming techniques such as developing a vision, enlisting others, fostering collaboration, and strengthening others (Kouzes & Posner, 1995) to encourage fellow workers to become better by growing and developing their skills. Therein lies the success of servant leadership. However, successful transformational leadership tends to enable and even promote the manipulation of followers by expert leaders. This is anathema to servant leadership (Whetstone, 2002). A servant leader and follower would focus on the vision jointly formulated and refined, avoiding manipulation by any party through a mutual commitment to participation, solidarity of the community, and respect for each person.

When we compare servant leadership with strategic leadership, we can say that servant leadership is one of the best ways to nurture human and social capabilities, while strategic leadership is about gaining access to key resources. The strategic leadership capabilities focus on social capital. On the other hand, human capital development is what servant leaders do best (McCallum & O'Connell, 2009). However, human capital management and social capital

management are not fully independent of one another. One strength of servant leadership and strategic leadership is managing both human and social capital (Hitt & Ireland, 2002).

Limitations of Servant Leadership. In critiquing some scholarly work on servant leadership theory, van Dierendonck (2011) opined that the strength of his model on servant leadership lies in the conceptualization of the notion of the need to serve, but this model neglects the leadership aspect. It must be stated that leadership is all about getting something done. The omission is very significant and substantial to the development of servant leadership theory. Another criticism of servant leadership involves the sizes of large institutions and corporations, which are challenges for servant leadership development and culture. Howson-Jones (2004) observed that the trust and empathy components of servant leadership bring clarity to expectations and sustain change and growth in multidisciplinary environments such as health-care institutions. Nevertheless, access to feedback can prove to be difficult for leaders in large or dispersed organizations. Consequently, for co-workers and followers to benefit from servant leadership, it is best applied to lead groups instead of entire organizations. This is because the effectiveness of the practice of servant culture may be limited by size. Organizations may consider creating a broader servant-minded culture throughout the organization, in order to better support and maintain the virtuous behaviors of servant leaders, in the long term (Liden et al., 2008).

Another shortcoming of servant leadership, according to some experts, is that servant leadership does not address the causes of social conflict external to the institutions for which Greenleaf prescribes servant leadership as a solution (e.g., racism, cultural and ideological diversity, unequal distribution of resources and goods). It does not address why some leaders can

be corrupt, neglect their workers, or exploit their followers. Langan (1978) suggests that these issues invalidate servant leadership services in large institutions.

Servant leadership is still on its journey towards becoming a strong theory. van Dierendonck (2011) noted that servant leadership scholars attempt to analyze servant leadership. However, the characteristics of servant leadership have not been taken to the next step, by formulating a model that differentiates between the intrapersonal aspects, interpersonal aspects, and outcomes of servant leadership. So, although these characteristics are understood intuitively, they have never been accurately operationalized. He went on to say that this gap has made valid and reliable studies based on these characteristics difficult, thereby hindering empirical research.

Another criticism, according to Berger (2014), is that some critics do not see servant leadership theory as a strong theory. Instead, they see it as a counter-culture management movement or, at most, a strong hypothesis. A stronger theory would also help alleviate the confusion about classifying servant leadership. If servant leadership is strongly formulated as a theory and its theory evaluation is explicitly defined, the academic research community would no longer be able to simply dismiss servant leadership as a philosophy or an ideal. Instead, the theoretical foundation would give servant leadership the seriousness required to garner the attention and interest of the broader leadership research community.

Furthermore, the term “servant leadership” is another issue. According to van Dierendonck (2011), “servant,” as generally defined, does not have a positive or inspiring connotation, given its socially constructed history. He also noted that words matter, and their socially constructed meanings have histories that cannot be changed, regardless of the effort exerted. He opined that some people or institutions wish to adopt, implement, and practice servant leadership, but are not very comfortable with the term “servant”. They feel that servant

leadership should be referred to by another name. Some others assume that their employees might associate servant leadership with religion or spirituality, which all may not be very comfortable with. For some, servant leadership is clearly enshrined in Christian ethics and must be considered within that context.

Jumaa and Jasper (2005) considered the theory and idea of servant leadership to be a return to authoritarian leadership. This is because the “servant leader” has many attributes of a “parent” figure. This parent figure derives its authority from the nurturing and benevolent discipline exercised during the leadership role. Some extant literature thinks that servant leadership is suited only for non-profits, religiously affiliated institutions, and organizations focused on community service. This is not without foundation. Even Greenleaf sometimes applied servant leadership to religious institutions.

The critics of servant leadership theory say that large institutions seek a competitive advantage over each other. The most important question for such institutions is: What are the advantages of the servant leadership attributes in a competition for profit? Barney and Hesterly (2008) distinguished two types of competitive advantage: temporary and sustainable. According to them, competitive advantage typically results in high profits, but these profits attract competition, and competition limits the duration of competitive advantage. However, Reed and Defillippi (1990) believed that strategy is a function of continuous competitive interaction. Competitive advantage is at the heart of a firm’s performance (Mahdi & Almsafir, 2014). The issue is how one can practice servant leadership and at the same time ensure a competitive advantage in modern institutions such as the health-care industry. This is a reasonable question that demands a reasonable answer. Nevertheless, servant leadership may be practiced in any

institution, especially health-care organizations, and still ensure that the organization remains competitive.

Employee Engagement

Schaufeli (2017) used the term “work engagement” to describe a positive, fulfilling, work-related state of mind, characterized by vigor, dedication, and absorption, rather than a momentary and specific state. However, scholars do not agree on a single terminology to describe the meaning or measurement of employee engagement. The keywords often used in literature to designate employee engagement include employee engagement, work engagement, job engagement, personal engagement, engagement at work, or engagement. Some literature has argued that it should be called “employee engagement”, while others propose using “job engagement” instead (Rich et al., 2010). There is thus no clear and widely accepted definition of employee engagement. Employee engagement is often an integration of varied behavioral components, such as commitment, involvement, attachment, discretionary effort, energy, positive attitude, and psychological presence. These components often transform employee potential into employee performance, which is positively linked to organizational success.

According to Saks and Gruman (2014), the above-mentioned problem of disagreement is partly due to the conceptual overlap of engagement with other, more established constructs such as job satisfaction, organizational commitment, job involvement, and organizational citizens’ behavior. Presently, some questions remain about how employee engagement differs from other constructs such as job satisfaction, job involvement, and job commitment (Shuck et al., 2012). Numerous existing studies on employee engagement generally seek to link engagement to employee commitment and performance in the workplace, which often translates into profits. Further, literature shows that disengaged employees can have damaging effects on an institution

or company through non-participation, absenteeism, unethical behavior, poor customer service, and frequent transmission of their negative attitudes to other employees.

Kahn (1990) emphasized both engagement and disengagement. He observed that people could use varying degrees of themselves: physically, cognitively, and emotionally, in work role performances, which has implications for both their work and experiences. He described personal engagement and personal disengagement in relation to employee engagement. He used these terms to describe the behaviors people bring into or leave out of their personal selves during work role performances. He opined that engagement involves harnessing organizational members' selves to their work roles. He went on to say that during engagement, people employ and express themselves physically, cognitively, and emotionally during role performances. Referencing Kahn's (1990) seminal work, Kaur (2017) noted that such first-time engagement is defined in terms of people's behavior during work role performances. Kahn (1990) further observed that personal disengagement is the uncoupling of selves from work roles. In the process of disengagement, people withdraw and defend themselves physically, cognitively, or emotionally during work role performances. The concepts of personal engagement and disengagement developed here thus integrate the idea that people need both self-expression and self-employment in their work lives. Kahn's way of defining engagement thus follows the behavioral approach (Rich et al., 2010).

On the other hand, Macey, and Schneider (2008) noted that engagement has different facets: psychological state engagement, behavioral engagement, trait engagement, as well as the work and organizational conditions that might facilitate psychological state and behavioral engagement. They offered propositions regarding job attributes and leadership as primary effects on psychological state and behavioral engagement. They viewed employee engagement as a

distinct construct, though it included components of organizational commitment, job involvement, and the positive affectivity components of job satisfaction (Macey & Schneider, 2008). Employee engagement is thus used to describe the state of mind of employees, who display a passion for their work and organization, reflecting commitment and contribution to organizational success.

Another group of scholars brought a different perspective to the concept of engagement. Schaufeli et al. (2013) noted that engagement refers to a more persistent and pervasive affective and cognitive state, which is not focused on any object, event, individual, or behavior. They identified three components of engagement: vigor, dedication, and absorption. Vigor, they said, is characterized by high levels of energy and mental resilience while working. They interpreted this to mean the willingness to invest effort in one's work, and persistence even in the face of difficulties. Dedication, they said, is characterized by a sense of significance, enthusiasm, inspiration, pride, and challenge. They also observed that being fully concentrated and happily engrossed in one's work, whereby time passes quickly, and one has difficulties detaching oneself from work, is a particular characteristic of absorption. They considered vigor and dedication the direct opposites of the core burnout dimensions of exhaustion and cynicism.

A new dimension to employee engagement was provided by Kowske et al. (2009). They suggested that employee engagement can also be defined as the extent to which employees are motivated to contribute to organizational success and are willing to apply discretionary effort to accomplishing tasks important to achieving organizational goals. Having noted the varied perspectives to work engagement, it can be said that leaders in each organization face the challenge of determining what drives high engagement and what causes disengagement among employees.

Drivers of Engagement

Varied factors drive work engagement. In his seminal work on “The Psychological Conditions of Personal Engagement and Disengagement,” Kahn (1990) observed that, at work, people essentially ask themselves three fundamental questions in performing each role situation: (a) How meaningful is it for me to bring myself into this performance? (b) How safe is it to do so? (c) How available am I to do so? These are the three psychological conditions for work engagement and work disengagement. In a broad sense, it can be thus concluded that meaningfulness, safety, and availability are the drivers of work engagement. Research by May et al. (2004) that used Kahn’s (1990) work engagement model found that all the three psychological conditions exhibited significant positive relations with work engagement. They observed that meaningfulness displayed the strongest relation, as job enrichment and work role fit were positively linked to psychological meaningfulness. They also found that rewarding co-workers and supportive supervisor relations were positively associated with psychological safety. Psychological availability was positively and significantly related to available resources and negatively related to participation in external activities. Finally, the researchers concluded that the relationships of job enrichment and work role fit with work engagement were fully mediated by the psychological condition of meaningfulness. In another study that researched the drivers of work engagement while identifying employee work engagement as a multidimensional construct, Saks (2006) specified perceived supervisor support, rewards, recognition, procedural justice, distributive justice, and perceived organizational support as the primary drivers of employee work engagement. However, in another study, Krishnaveni and Monica (2016) identified five drivers of engagement: job characteristics, good supervisor, good co-worker relations, training and development, and rewards and recognition. They noted that these drivers, when initiated and

enhanced in the workplace, aid work engagement, which leads to organizational effectiveness that eventually results in competitive advantage. In this model, employees look to engage themselves only when the organization addresses their needs and when they can identify themselves with it. Hence, the essence of work engagement can be fully captured only when employees' psychological and emotional needs are met, and this can be further harnessed into drivers that channel energies into the physical, emotional, and cognitive dimensions of the employee's needs. In a study by Popli and Rizvi (2016), leadership was portrayed as the major driver of employee engagement in an organization's journey towards becoming the best employer. They observed that leaders achieve employee engagement in both direct and indirect ways. Leaders have an indirect multiplier effect on all the other top work engagement drivers and other best employer indices. Ultimately, leaders make the decisions about brands, performance goals, pay and recognition, communication to employees, work process, and innovation. Sometimes, work circumstances are related to the drivers of work engagement. Three key drivers of work engagement for the non-executives included: union or association-management relations, recognition or rewards, and welfare facilities. In a study that examined the role of organizational support in employee work engagement, Yadav (2016) indicated that perceived organizational support is strongly correlated to employee work engagement: $r(112) = .54, p < .01$. He also opined that individualism moderates the positive relationship between perceived organizational support and employee work engagement, such that the relationship is stronger for those high on individualism than those who are low on individualism. Hewitt's (2017) "Trends in Global Employee Work Engagement Report", which examined employee work engagement on a global scale, suggested that leaders hold the key to employee work engagement. Engaging the right employees in demonstrating the right behaviors remains a critical ingredient for

companies intending to raise performance levels, in today's challenging economic conditions. Hewitt (2013) also observed that global work engagement levels have increased slightly; yet four of 10 employees are still not engaged. Certain key focus areas of action have been proven to make a difference in organizations with high levels of work engagement. These areas include work environment, career development, rewards, recognition, and pay. In another study, Rivera et al. (2011) identified autonomy and input, manager action, nurse staff teamwork, non-nurse teamwork, personal growth, recognition, salary and benefits, passion for nursing, and work environment as the drivers of work engagement. In a structured literature review, Wollard and Shuck (2011) differentiated between individual and organizational drivers or antecedents to employee work engagement. They opined that the nature or the type of industry has much to do with what drives employee work engagement.

In summary, Kaur (2017) observed that according to existing literature, employee engagement is an individual-level construct displayed at three different levels: (a) behavioral, (b) emotional, and (c) cognitive. Literature suggests organizational communication, rewards/remuneration and recognition, organizational culture, and workplace relationships as the most studied drivers of work engagement. Further, organizational citizens' behavior and retention are the most studied consequences of employee engagement. Finally, as Saks and Gruman (2014) concluded, there is a lack of consensus on the meaning of employee work engagement and on the validity of the most popular measures of employee work engagement. As such, it is difficult to make causal conclusions about the antecedents and consequences of employee engagement, due to several research limitations. Thus, there remain many unanswered questions and much more to do if we are to develop a science and theory of employee work engagement.

Consequences of Work Engagement

Work engagement has various consequences depending on diverse factors. A meta-analytic study that distilled the average effect of work engagement on organizational outcomes found that hundreds of studies showed work engagement to be a crucial predictor of job and organizational performance. The analysis provided strong evidence that work engagement leads to key organizational outcomes, including creativity and innovation, client satisfaction, positive financial results, and reduced sickness-related absenteeism (Bakker, 2017). Bedarkar and Pandita (2014) also identified performance as the consequence of employee engagement. The researchers analyzed three drivers of engagement: communication, work-life balance, and leadership. They went on to say that employees are the key assets for any organization, and if they are not given the right space and time to create a perfect blend of work and fun at the workplace, then a sense of disengagement sets in among the employees. Further, another study that examined the relationship between job fit, affective commitment, and psychological climate by Shuck et al. (2011) found that all these factors were significantly related to employee engagement, while employee engagement was significantly related to discretionary effort and turnover intention.

However, it is important to note that organizations and employees are both dependent on each other for fulfilling their goals and objectives. Therefore, employee engagement should not be a one-time exercise, but should be integrated with the company's culture. Employee engagement should be a continuous process of learning, improvement, and action. According to Chanana and Sangeeta (2020), engaged employees support the organization in attaining its mission, executing its strategy, and generating significant business results. Thus, organizations today should actively look forward to fulfilling employees' expectations, and thereby create a positive impact on the performance of employees, which in turn will directly affect the

organization's performance. Engaged personnel are always optimistic, maintain good interpersonal rapport with each other, and show a high level of performance within the organization (Jena et al., 2018). When individuals work to utilize their signature strengths, positively manage their emotions, and align their values to those of the organization more effectively, the organization should ultimately enhance the employees' happiness, well-being, and work engagement. This will most likely lead to peak performance by the employees. Various studies show that work engagement enhances both financial and non-financial performance. Financial performance refers to the financial profit of an organization. Non-financial performance includes customer satisfaction, service proficiency, attendance, and retention.

The above finding is confirmed by a study that sampled nurse population and examined some drivers of engagement among nurses. The study analyzed the relationship and consequence of autonomy and input, manager action, nurse staff teamwork, non-nurse teamwork, personal growth, recognition, salary and benefits, passion for nursing, and work environment as the drivers of engagement. Pearson product-moment correlation coefficients from this study indicated that these drivers of engagement were significantly positively correlated to the engagement index ($p < .001$, two-tailed test). The lowest correlation coefficient was found with the salary-based index, but this was still significant at $p < .001$, while the highest correlation coefficient was found with managers' actions (Rivera et al., 2011).

Engagement may thus be described as a two-way process between employees and an organization. It is a strategy to enhance the productivity and performance of an employee. It is also a process to ensure an employee's commitment, motivation, and contribution toward achieving organizational goals and values. Engagement enhances the well-being of the employees (Jha & Kumar, 2016). Engaged employees have an abundance of resources that they

can invest in their work. They are enthusiastic about their work, immersed in their work activities, and persistent when confronted with challenges and hindrances. In a synthesis of narrative evidence involving 214 studies focused on the meaning, antecedents, and outcomes of engagement, Bailey et al. (2017) found that engagement was positively associated with individual morale, task performance, extra-role performance, and organizational performance. The evidence was most robust with reference to task performance.

Based on the preceding review of literature in this chapter, we can deduce that varied studies across different backgrounds tend to confirm that burnout, exhaustion, and disengagement are dangerous to employees, employers, and society at large. Burnout is an enemy of work engagement. Theoretically speaking, servant leadership behavior looks promising as an antidote to burnout: exhaustion and disengagement. Greenleaf (1977) placed going beyond one's self-interest as a core characteristic of servant leadership. Furthermore, Canavesi, (2021) said that servant leadership can both mitigate burnout and drive work engagement. However, based on the literature reviewed above, it can be said that several factors, and not just good leadership (i.e., servant leadership, drive work engagement), are vital to avoid burnout and enhance work engagement. According to the literature review in this chapter, the consequence of employee work engagement is profitability for the institution and the well-being of the employee. The present study intended to examine the correlation between the servant leadership behavior of the nurse supervisor and burnout as well as work engagement among nurses. Accordingly, research questions were framed. The details of the study will be described in the following chapter.

Chapter 3

Methodology

Type of Study

The study design was explorative, and correlational and employed a convenience-sampling-based survey method. The target population consisted of nurse employees in three teaching hospitals in Nigeria. Nurses who participated in the study were selected using convenience sampling. They rated their nursing supervisors, using a survey that measured the employee's perception of the supervisor's servant leadership behavior. A nurse employee rated only one nurse supervisor, though more than one employee may have rated the same supervisor. The supervisor, a participant rated was the supervisor under whom the participant was working at the time of the study. Participants also rated themselves utilizing a second survey that measured an individual's perception of their work engagement, and a third survey that measured an individual's perception of their work burnout.

Variables and Definitions

The variables in the study include (a) burnout, which consists of disengagement and exhaustion; (b) work engagement, comprising vigor, dedication, and absorption; and (c) servant leadership behaviors. There is no generally agreed definition of burnout. However, the two most cited definitions of burnout are: burnout as a psychological syndrome of employee engagement, depersonalization, and reduced performance assessment (Maslach et al., 2003); and burnout as a psychological syndrome of exhaustion and disengagement from work (Demerouti & Bakker, 2008).

Burnout

The present study has operationally defined burnout as a psychological syndrome of exhaustion and disengagement from work. This definition is based on the conceptualization of burnout by Demerouti and Bakker (2008), this is more comprehensive, contrary to exhaustion as operationalized in the original Maslach Burnout Inventory or Maslach Burnout Inventory-General Survey, which emphasizes only the affective aspect of burnout.

Exhaustion. One of the components of burnout is exhaustion. For the present study, exhaustion has been defined as an intensely physical, affective, and cognitive strain (i.e., as a long-term consequence of prolonged exposure to certain job demands) (Demerouti et al., 2017). Exhaustion is characterized by energy depletion, resulting from enduring physical, affective, or cognitive strain (Scanlan & Still, 2019). When an employee begins to feel disinterest in completing the project, because of the thought that whatever the employee does, the employee just does not feel good about doing it or fears that it will only bring more work, the employee does not like to stay at the employee desk. The employee gradually begins to feel a sense of disengagement that does not go away. Over time, this could lead to a cynical attitude and a continual sense of a lack of desire to do things well. This begins affecting performance due to burnout. An employee who experiences burnout stops being productive and, more importantly, can negatively influence colleagues who work with them (Moodie et al., 2014).

Disengagement. The other component of burnout is disengagement. In this study disengagement refers to distancing oneself from one's work in general, from work objects, and work content (e.g., uninteresting, no longer challenging, disgusting) (Demerouti et al., 2017). As part of disengagement from work, employees withdraw and defend themselves cognitively, emotionally, and behaviorally during role performance (Kahn, 1990). Disengagement concerns

the relationship between employees and their jobs, particularly with respect to identification with work and willingness to continue in the same occupation. Disengaged employees endorse negative attitudes toward their work objects, work content, or work in general.

Disengagement and exhaustion can negatively impact employee health, especially in the case of health-care workers. It can also negatively affect an organization. This negative impact can have the ripple effect of reduced empathy and productivity, which in turn can spiral into serious quality and financial issues for health-care providers, if ignored. Physically, the burned-out person feels exhausted or has chronic fatigue. Emotionally, they feel a sense of low motivation, self-doubt and failure, helplessness, defeat, entrapment, and detachment from the workplace, etc. Behaviorally, burned-out people isolate and withdraw from peers. They vent their frustrations on others, evade responsibilities, and procrastinate. All of this leads to decreased productivity (Moss, 2019). The above definitions make it clear that disengagement and exhaustion are serious issues in the workplace, especially among health-care practitioners, and that managers and supervisors must show the necessary leadership required to combat these issues. Therefore, exhaustion and disengagement are the constructs forming the variables for measurement in the study.

Exhaustion in the Oldenburg Burnout Inventory (OLBI) used in this study covers affective aspects of exhaustion and physical and cognitive aspects. The understanding of burnout in this instrument is very expansive. This facilitates the application of the instrument to those workers who perform physical work and whose job is primarily about processing information.

Servant Leadership

This study has adopted the following as the operational definition of servant leadership: “Servant leadership is an other-oriented approach to leadership manifested through one-on-one

prioritizing of follower's individual needs and interests and outward reorienting of their concern for self toward concern for others within the organization and the larger community" (Eva et al., 2019, p. 114). This definition has three features that make up the essence of servant leadership, namely, its motive, mode, and mindset. The motive of servant leadership (i.e., other-oriented approach to leadership) does not stem from within but outside the leader, as Greenleaf's (1977) initial "servant-first" seems to suggest. Second, the mode of servant leadership is manifested through one-on-one prioritizing of followers' individual needs, interests, and goals above those of the leader, which reflects a recognition that each follower is unique and has different needs, interests, desires, goals, strengths, and limitations. Finally, the mindset of servant leadership (outward reorienting of their concern for self toward concern for others within the organization and the larger community) reflects that of a trustee. The deliberate focus on follower development is maintained within a concern toward the larger community and a commitment to be accountable for their well-being (Eva et al., 2019).

Based on the above definition, it can be said that servant leadership is a set of behaviors and practices that turn the traditional power leadership model upside down. Instead of followers working to serve the leader, the leader exists to serve the followers. As a result, the practice is centered on a desire to serve and emphasizes collaboration, trust, empathy, and the ethical use of power. Its primary goal is to enhance individual growth, teamwork, and overall employee involvement and satisfaction (Servant Leadership Institute, 2019):

That person is sharply different from one who is leader first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions. . . The leader-first and the servant-first are two extreme types. Between them, there are shadings and blends that are part of the infinite variety of human nature. "The difference manifests itself in the

care taken by the servant-first to make sure that other people's highest priority needs are being served. The best test, and difficult to administer, is: Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? And what is the effect on the least privileged in society? Will they benefit or at least not be further deprived?" (Greenleaf, 1977, p. 27).

According to Spears (2010), some servant leadership characteristics stand out. They are (a)

Persuasion: A servant leader does not coerce compliance, rather tries to persuade. This is the distinction between servant leadership and the authoritarian model of leadership.

(b) Conceptualization: A servant leader thinks beyond the limits of the present business but focuses on long-term operating goals. Foresight is the ability to foresee the likely outcome of a situation. (c) Stewardship: Servant leadership, like stewardship, assumes first and foremost a

commitment to serving the needs of others. (d) Commitment: A servant leader nurtures the personal, professional, and spiritual growth of employees. (e) Building community: A servant

leader identifies the means to build a strong community within their organization. (f) Listening: Active listening helps the servant leader to bring about positive change and motivate the co-

workers to be effective. It also enhances understanding of other people's ideas and viewpoints. (g) Empathy: This entails the servant leader's understanding and empathizing with others. (h)

Healing: It is the understanding that the search for wholeness is something the servant leader and the follower share. (i) Awareness: This is the ability to view situations from a more integrated,

holistic perspective (Spears, 2010). Good leadership, whether in the form of having an inspiring

manager, giving and getting regular feedback, or simply knowing that your leader has your back, can help prevent burnout. According to extant literature, the opposite is also true. Bad leaders are

not just toxic to an organization. They drive burnout, decrease job satisfaction, and reduce employee engagement.

Work Engagement

This is defined and operationalized as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli & Bakker, 2010, p. 74). In a state of engagement, fulfillment exists, in contrast to the state of burnout when there is a feeling of emptiness.

Vigor. This is characterized by high energy levels and mental resilience while working, the willingness to invest effort in one’s work, and persistence even in the face of difficulties.

Instruments

The present study has utilized already validated psychometric tools. Linden’s Servant Leadership Scale was used to measure servant leadership, the Utrecht Work Engagement Scale (UWES) was used to measure employee work engagement, and the Oldenburg Burnout Inventory was used to measure burnout.

Utrecht Work Engagement Scale (UWES)

According to Schaufeli et al. (2002), burnout and work engagement are not direct opposites. They are conceptually distinct concepts that should be measured independently. Schaufeli et al. (2006) argued that an employee experiencing burnout is not necessarily disengaged from work. On the other hand, an employee who is low on work engagement may not necessarily be experiencing burnout. In addition, they also argued that the relationship between burnout and work engagement could not be empirically studied, if both variables are measured with the same instrument. Hence, they developed and tested the UWES, a self-report questionnaire that measures the three aspects of work engagement: vigor, dedication, and

absorption. The UWES is a 9-item questionnaire with a 7-point Likert scale (0 = never, 1 = a few times a year or less, 2 = once a month or less, 3 = a few times a month, 4 = once a week, 5 = a few times a week, 6 = every day). The UWES has a high internal consistency (Cronbach's alpha ranges between .80 and .90) across all three scales: vigor, dedication, and absorption. Although there are three subscales, the instrument chiefly measures employee work engagement (Schaufeli, 2017). The UWES also has high test-retest reliability on all three subscales and is internally consistent and stable across time (Schaufeli et al., 2013). Higher UWES scores indicate higher levels of work engagement (Schaufeli & Bakker, 2010). The UWES has been used and validated in various continents and countries, including Africa and South Africa, China, Finland, Greece, Spain, and the Netherlands (Demerouti & Bakker, 2008). This instrument measures an individual's work engagement based on the definition of employee work engagement that includes vigor, dedication, and absorption (Demerouti & Bakker, 2008; Schaufeli et al., 2013).

The Servant Leadership Scale 7 (SL-7)

This instrument was designed to measure both positive and negative characteristics of servant leadership. The tool is based on the social exchange theory: when leaders prioritize the needs of followers above their self-interest and show concern for followers' ambitions and potential, followers reciprocate the good deeds of their leaders by developing work attitudes and engaging in work behaviors that benefit their leaders. The support and encouragement provided to followers by servant leaders in the form of empowerment, prioritization of fulfilling follower needs, and the striving to bring out the full potential in followers serve to enhance follower job performance and engagement. Specifically, servant leadership promotes a climate of procedural justice and a culture of service. As strong climates and cultures are pervasive, they are shared by

followers, thus influencing both team processes and outcomes. The more the followers perceive that procedural fairness and an orientation toward helping/serving others are promoted, the more they respond with higher levels of team performance.

The SL-7 is a reduced version of the SL-28 yet retains the essential items. The SL-7 includes the following seven dimensions: (a) emotional healing, (b) creating value for the community, (c) conceptual skills, (d) empowering, (e) helping subordinates grow and succeed, (f) putting subordinates first, and (g) behaving ethically. According to Liden et al. (2008), the reliability in terms of internal consistency has been found to be good for all SL-7 scales: Cronbach's alphas were .94 for empowerment (7 items), .93 for accountability (3 items), .92 for standing back (3 items), .95 for humility (5 items), .76 for authenticity (4 items), .91 for courage (2 items), .90 for forgiveness (3 items), and .87 for stewardship (3 items).

The instrument's developers further validated the SL-7 using three separate standalone studies and six independent samples (Liden et al., 2015). They found reliability for the SL-7 in each study, with a composite Cronbach's alpha coefficient that ranged from .80 to .90. They also established criterion and convergent validity for the SL-7 at the individual and group levels. The SL-7 items are measured on a five-point Likert Scale where (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) (Liden et al., 2015). The internal reliability for the SL-7 is Cronbach's alpha reliability coefficient of 0.84.

Oldenburg Burnout Inventory (OLBI)

The OLBI is based on the understanding that burnout is caused by long-term aversive working conditions and is characterized by the simultaneous experience of the symptoms of exhaustion and disengagement from one's job. This is rooted in the JD-R model. The OLBI consists of two dimensions: exhaustion and disengagement. Whereas exhaustion is a

consequence of intensive physical, affective, and cognitive strain, disengagement is defined as distancing oneself from one's work and experiencing negative attitudes toward the work objects, work contents, or one's work in general (Demerouti et al., 2001). Empirical findings have established that job demands lead to exhaustion, and a lack of job resources results in disengagement (Bakker et al., 2004).

The OLBI contains 16 items that are both negatively and positively phrased. The tool assesses exhaustion and disengagement from work. The response scale is a 4-point Likert ordinal scale that begins with strongly disagree (1) and ends with strongly agree (4). Scores closer to the four-point range indicate an increased burnout level, while scores closer to the one-point range indicate a decreased level of burnout. The English version of the OLBI was determined to be reliable, with a Cronbach's alpha level in the range of .74 to .79 for exhaustion and .76 to .83 for disengagement from work. The test-retest coefficients established correlation during its testing (exhaustion $r = .51$, $p < .001$, and disengagement from work $r = .34$, $p < .01$). Exploratory and confirmatory factor analysis established its two-dimensional factor structure. Support was also found for factorial validity and construct validity of the OLBI (Halbesleben & Demerouti, 2005).

In tandem with the use of the above instruments, to analyze the data that were collected, tests for assumptions for multiple linear regression were carried out: linearity, homoscedasticity, and multicollinearity (Field, 2013). Regression analysis of participants' socio-demographic factors, gender, age, work environment, and work experience were also conducted against each measure. This helped to analyze the variance in nurses' burnout and engagement scores.

Study Population and Sample: Inclusion/Exclusion Criteria

The participants of the study were recruited from three teaching hospitals in Nigeria, funded by the Nigerian federal government. UNTH Enugu emphasized the servant leadership

behavior of its supervisors. UPTH and LUTH did not explicitly endorse servant leadership behavior of their supervisors. The ethical committees of the hospitals approved the study. After they received the letter of approval for the study from the Seton Hall University Institutional Review Board, they granted access to the nursing population of the three hospitals.

The hospitals selected for the study are tertiary hospitals in Nigeria. They are owned and funded by the federal government of Nigeria. They have the same administrative and organizational structure. All the nurses are full-time employees. The order of seniority among the nurses is stable, and the assignment of a nurse to a ward/unit lasts for a long time. This gives the supervisor and the employees time to work together for some time and develop a relationship. This proved to be convenient for assessment of the relations between the nurse supervisors and the nurses. The nurse supervisor in this study is the nurse's supervisor, during the time of the nurse's participation in the study. A nurse could only assess one supervisor. Any nurse who met the criteria for the study and was willing to participate in the study was recruited into the study.

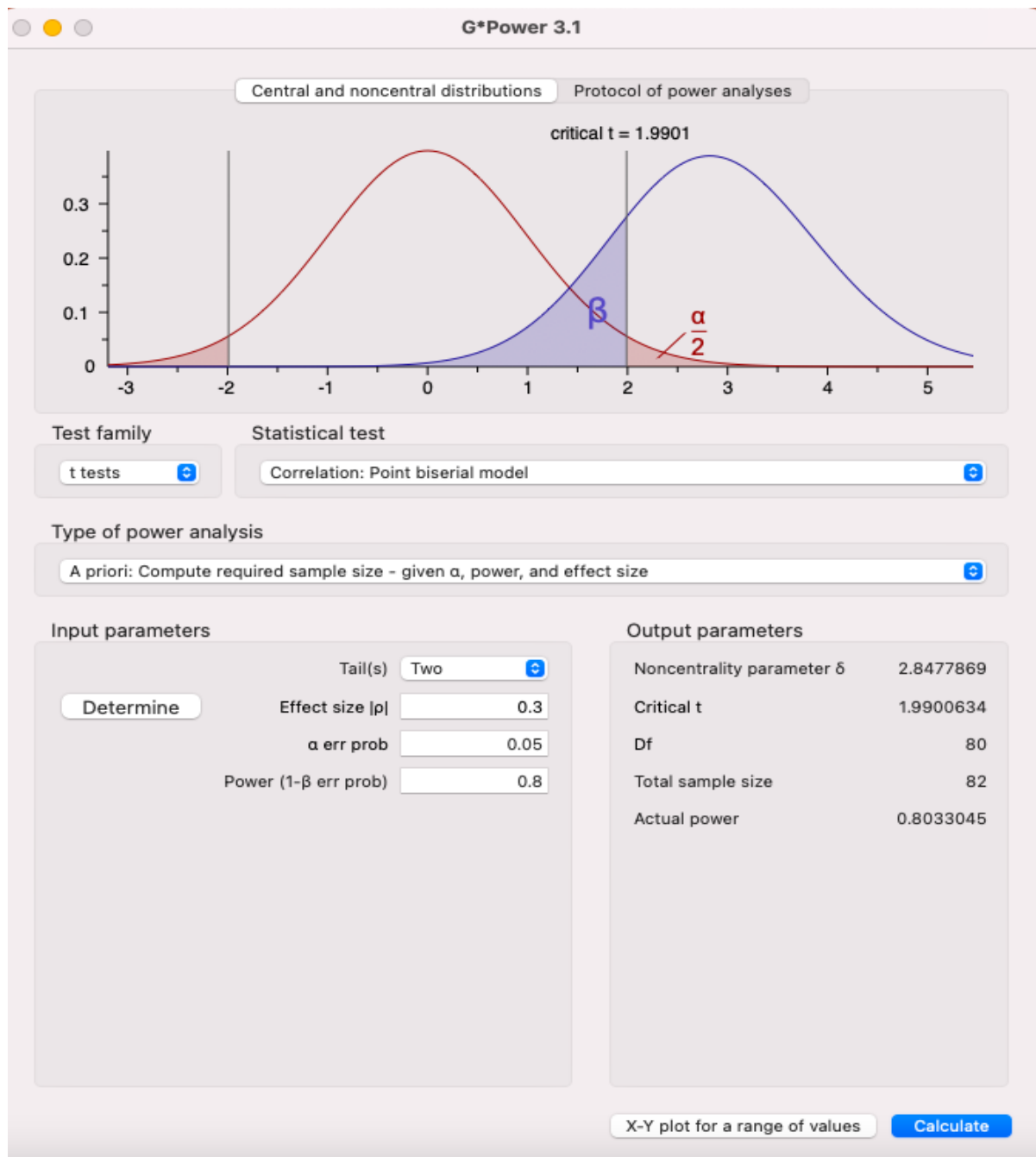
The study used both purposive sampling and non-purposive/snowball sampling. The participants were at least 18 years old and not more than 64-years-old. They were registered nurses and were accountable to a supervisor or manager. All the participants were able to communicate in English. They were also full-time workers at the participating hospitals. The participants worked at the UPTH, LUTH, and UNTH. Any nurse who was not a full-time employee or was younger than 18 years or older than 64 years was excluded. All unregistered nurses or nurses not working at any of the above-mentioned hospitals were also excluded. Any nurse without a supervisor or manager and any nurse who could not communicate in English were also excluded from the study.

Sample Size

G-power was used to conduct the a priori calculation to identify the number of participants needed for the study. In using G-power, I used point-biserial correlation, a special case of the product-moment correlation, wherein one variable is continuous, and the other variable is binary. The categories of the binary variable do not have a natural ordering. This is appropriate for the Spearman correlation coefficient. According to the G-power point-biserial model, Spearman, 82 participants were required. Since I validated the results using the Pearson correlation coefficient, which is the parametric equivalent of the Spearman correlation coefficient, a non-parametric statistical tool, I also calculated the required number of participants using Pearson to validate the result. In this calculation, I used the bivariate normal model. According to G-power: bivariate normal model: Pearson, 84 participants were required. To avoid the issues of attrition and non-completion of survey, I chose to add these two figures and multiply the result by 2 to arrive at a larger than required targeted number of study participants: total number of participants = $82 + 84 * 2 = 332$. It was expected that this inflated target number of participants would help ensure that the study was adequately powered.

Figure 8

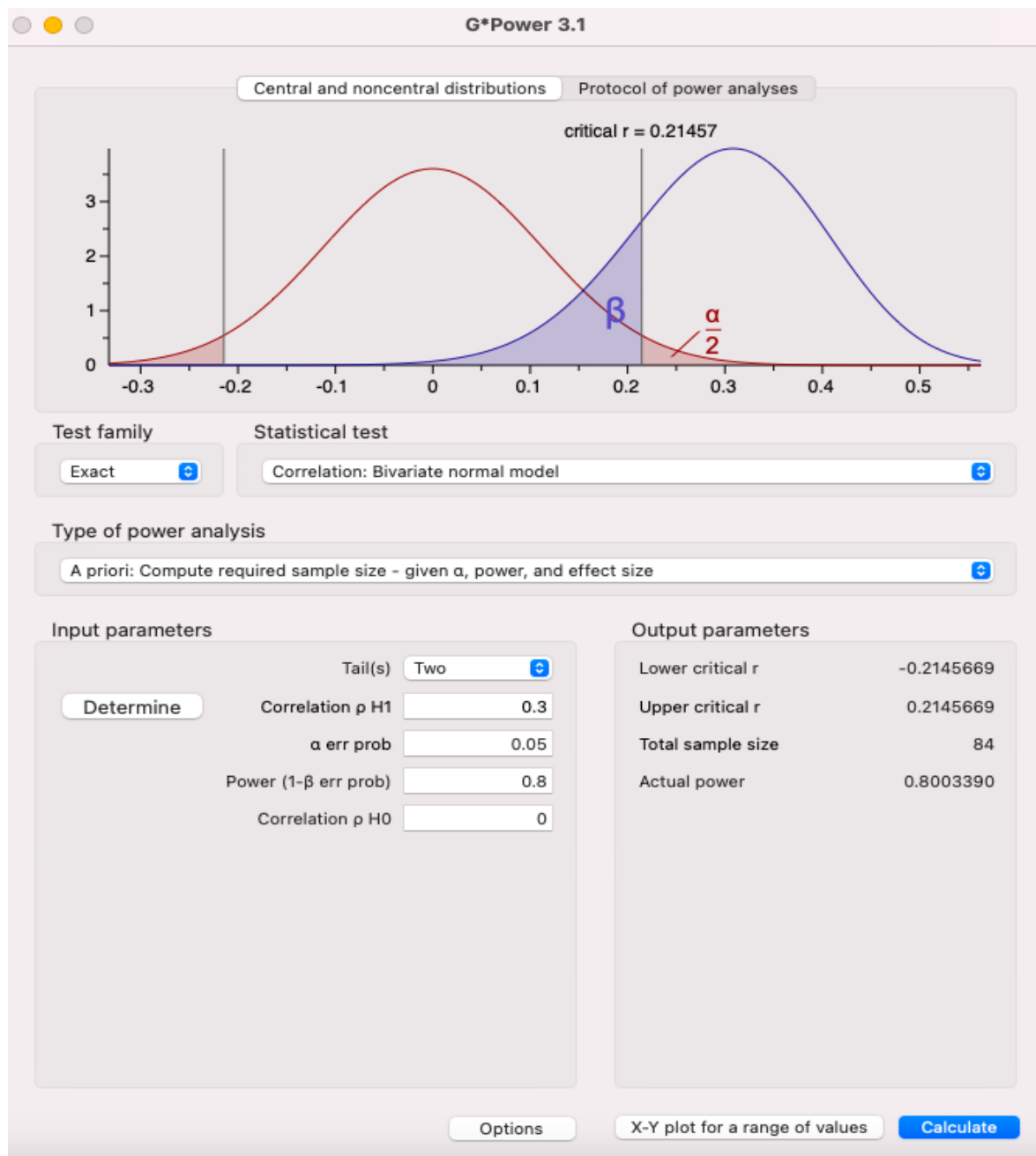
G-power Point-biserial Model, Spearman



Note: Figure 8 is the g-power two tail output of the sample size required for the study. It is the Point-biserial Model, Spearman. The effect size was 0.3, the error probability was 0.05, the power was 0.8. The result was a sample size of 82.

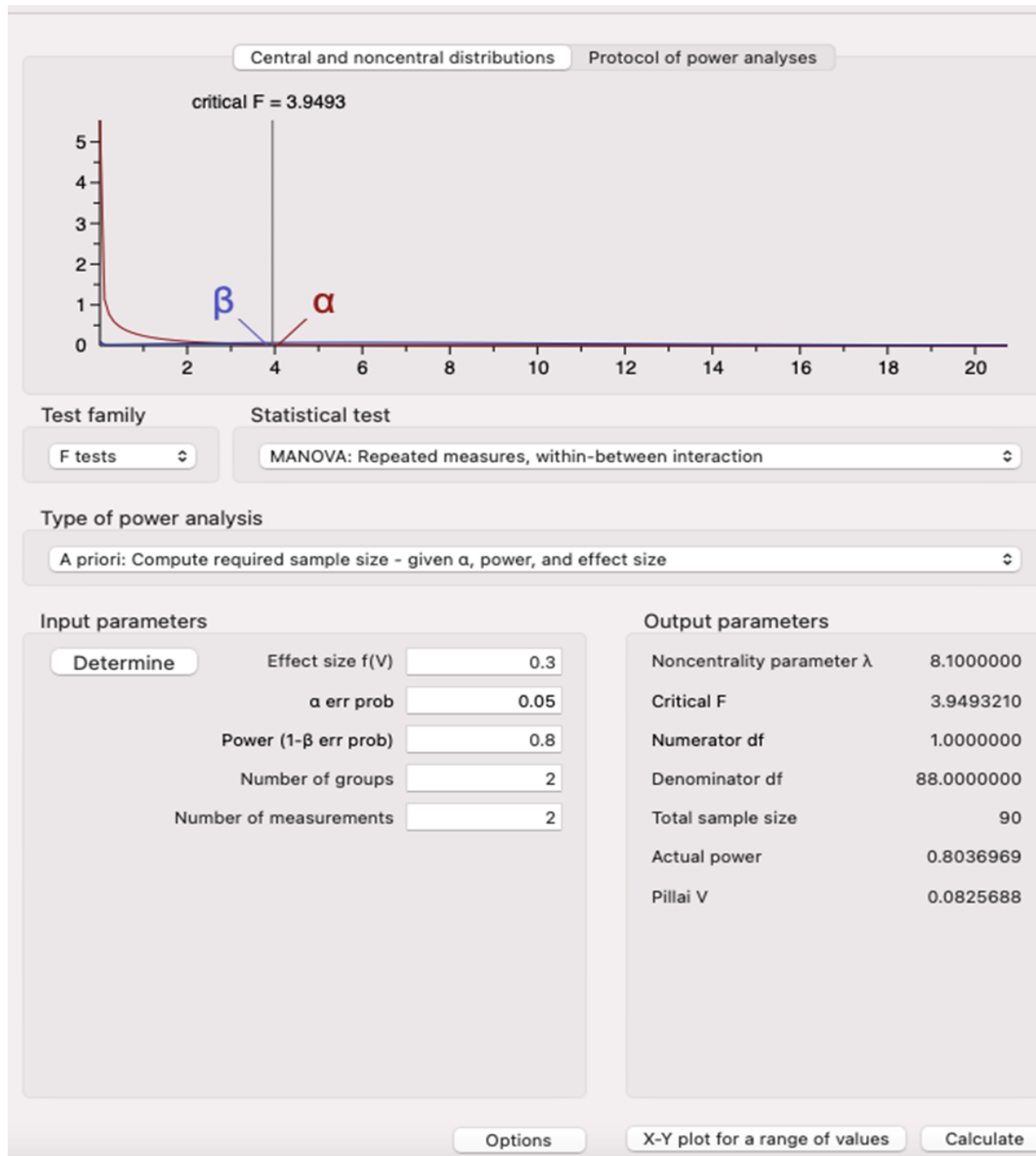
Figure 9

G-power: Bivariate Normal Model: Pearson



Note: Figure 9 is the g-power two tail output of the sample size required for the study. It is the Bivariate Normal Model: Pearson. The effect size was 0.3, the error probability was 0.05, the power was 0.8. The result was a sample size of 84.

Figure 10 *G-Power, F Tests - MANOVA: Repeated measures, within-between interaction*



Note: Figure 10 is the G-Power, F Tests - MANOVA: Repeated measures, within-between interaction output of the sample size required for the study. The effect size was 0.3, the error probability was 0.05, the power was 0.8. The result was a sample size of 90.

Participant Recruitment and Data Collection

After receiving approvals from the Seton Hall University Institutional Review Board and the ethical boards of the participating hospitals, I approached the directors of nursing of the participating hospitals, with the letters of approval, in order to be allowed to collect data for the study. Subsequently, the directors of nursing allowed me to begin the participant recruitment, considering this to be an international study. They posted the solicitation flyers on the notice boards of the hospitals and the nurse lounges. They also advertised the study by word of mouth.

I visited each hospital four different times a week: a visit in the morning and evening on two different days. Because of the COVID-19 pandemic, I was not allowed to visit the hospital wards. At the UNTH Enugu, I was advised to stand in the lobby, the main entrance to the different wards. Most nurses went through this lobby to their various units for work. The administration judged this location to be suitable for maximum and safe participation. This was where I distributed the packets containing the four questionnaires. The participants filled out the questionnaires and dropped them inside a box with a slot, which I placed at a safe corner of the lobby. I emptied the box every day before leaving the hospital. At the university teaching hospitals in Lagos and Port-Harcourt, I was advised to distribute the questionnaire packets in the corridor leading to the nurses' room and place the box inside the nurses' room. The administrations considered this to be effective for ensuring maximum and safe participation. The participants dropped the filled and unfilled questionnaires into the boxes. I emptied the boxes and resealed them before leaving, on the days I visited these hospitals. These locations were convenient because they were secure, private, and easy to find.

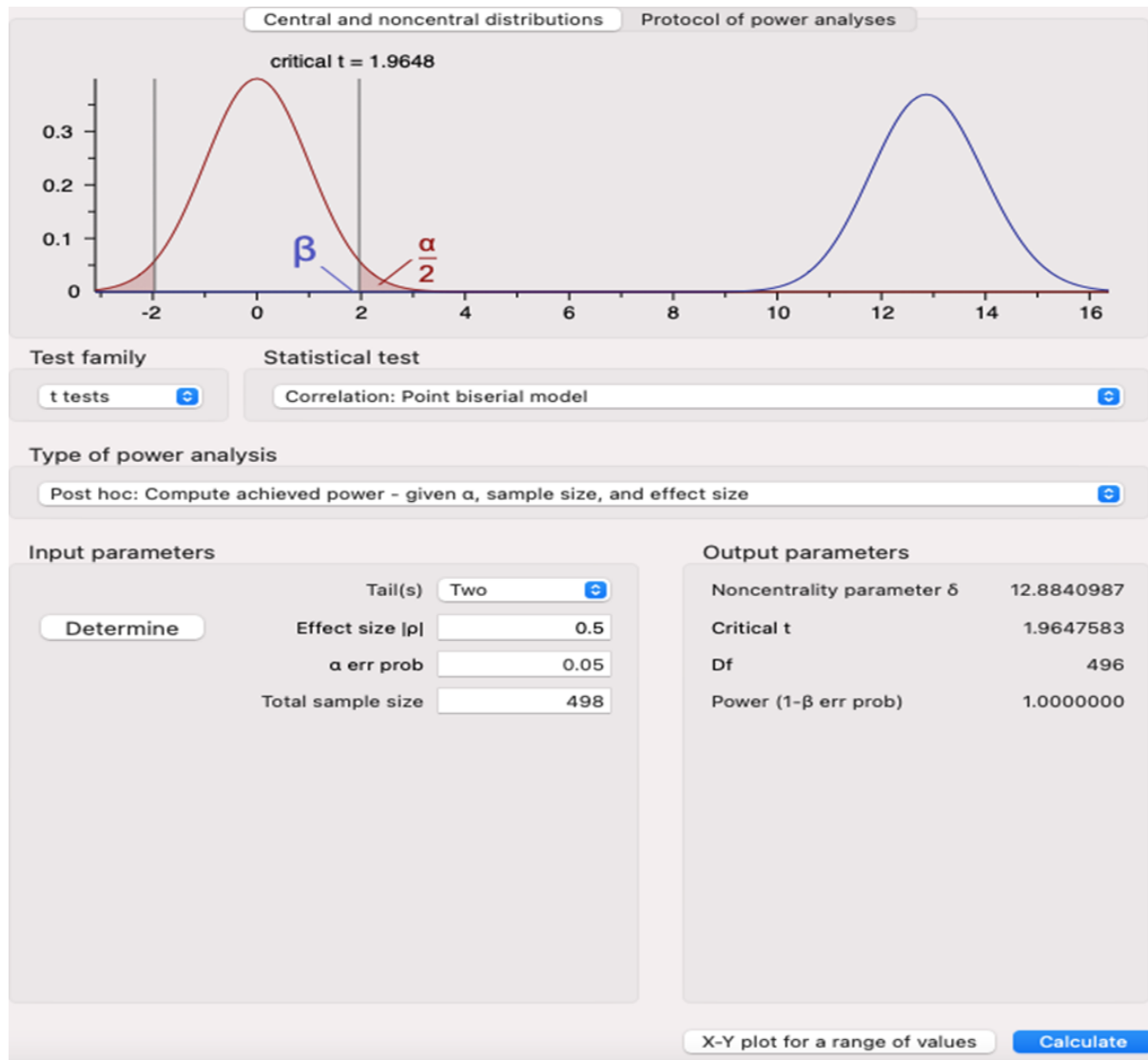
Based on the information available, the UNTH had 642 nurses, including 237 supervisors; the UPTH had 532 nurses, including 201 supervisors; and the LUTH had 566 nurses, including 226 supervisors. There were a total of 1740 nurses in all the three hospitals.

Data Processing and Statistical Analysis

I checked all the returned questionnaires for completeness. Any questionnaire that was 95% complete was included for analysis. It was considered 95% complete if the incomplete part of the questionnaire is in the demographic section that I created. The instruments measuring Burnout, Engagement and Servant Leadership Behaviors were sacrosanct. Next, I transferred the paper-based survey data to SPSS version 25. A more experienced research scholar audited the accuracy of the data transferred. No personally identifying data was collected, so that no one would be able to link the data to any individual. To further protect the anonymity of individuals participating in the study, all results were reported as group averages or aggregates. The data was safely stored on a USB drive and placed in a safe metal box in my office, which can be accessed only by me. Thus, confidentiality was ensured.

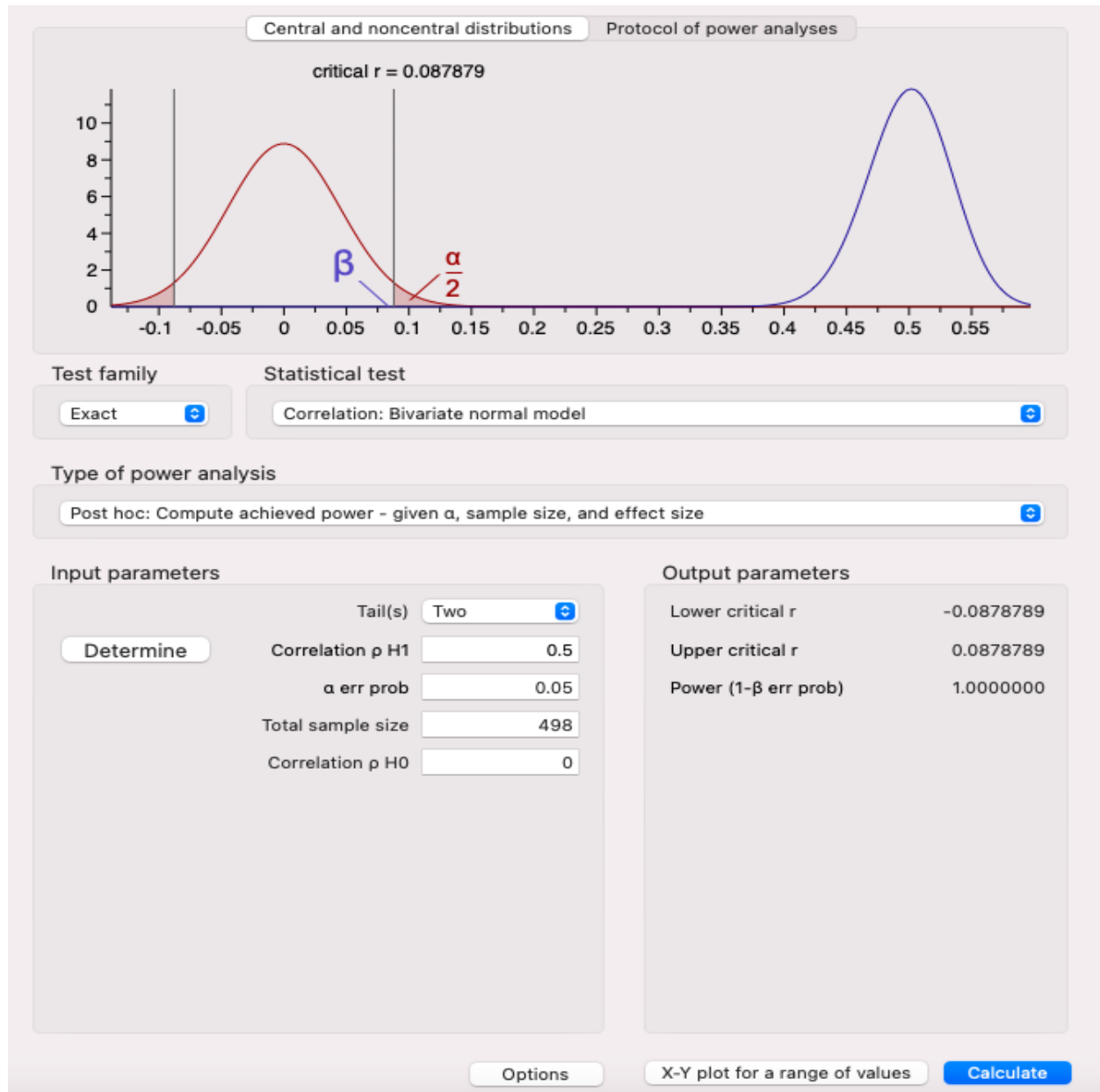
Figure 11

Post-Hoc Data Analysis Spearman's Correlation Coefficient



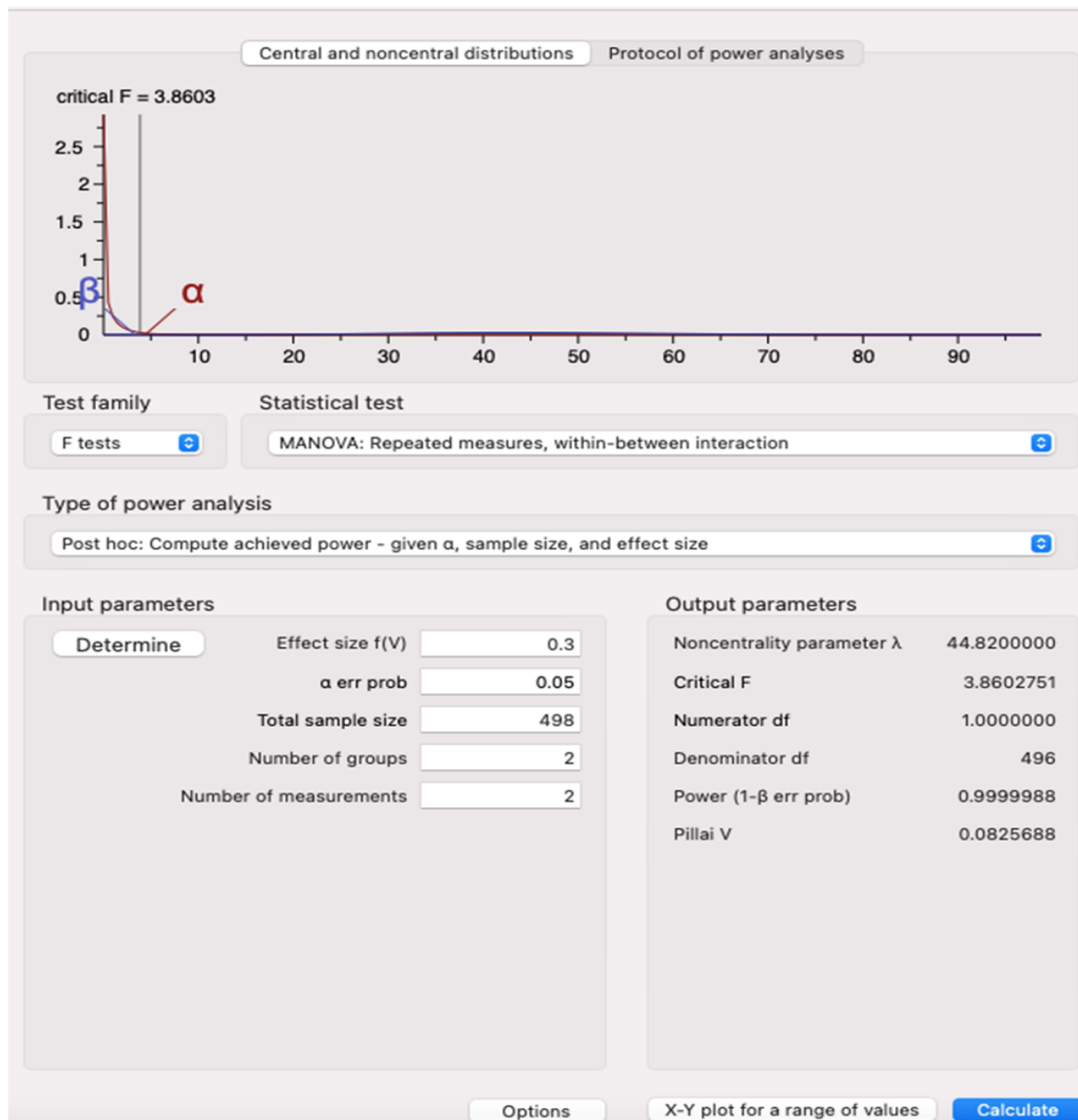
Note: Figure 11 is the two tail post hoc data analysis of the T-test, Point Biserial, Spearman, showing that the power of the study is more than 0.99. Subsequently, post-hoc data analysis was carried out. The sample of 498 used was two more than the figure of 496 in the post-hoc data analysis result. Moreover, the power was more than .99, which means that the hypothesis test proved to be very good at detecting a false null hypothesis.

Figure 12 Post-Hoc Data Analysis Pearson's Correlation Coefficient



Note: Figure 12 is the Post-Hoc: Exact Protocol and power Analysis Bivariate normal model, Pearson. It also computed the achieved power as more than .99.

Figure 13 Post-Hoc, MANOVA Repeated Measures Within-Between Interactions Central and Non-Central Distribution



Note: Figure 13 is the Post-Hoc, MANOVA Repeated Measures Within-Between Interactions Power Analysis. It shows that the study archived the power of more than 0.99. The 498 samples used for the study is more than the (496 samples) given by the post- hoc data analysis. This shows that the study has enough power.

Chapter 4

Venue, Data, and Materials

The study took place at three tertiary hospitals in Nigeria: University of Nigeria Teaching Hospital Enugu (UNTH), University of Port Harcourt Teaching Hospital (UPTH), and Lagos University Teaching Hospital (LUTH). Of the 650 questionnaires distributed, 98 of them were not returned, and 63 of those returned were discarded because they were improperly filled and therefore could not be used. The number of well-filled and valid questionnaires returned was 498. Among those that came back valid, 65 were 95% filled. -99 was used to fill the incomplete questions in the questionnaire so the software could manage them. A questionnaire was considered 95% filled if it did not have errors or omissions on any of the three questionnaires or the demographics. This means that there were 498 samples for analysis, this is approximately 77 % of the 650 questionnaires. The software used for analysis in the study included: Mplus 8 version 8.1, SPSS version 26 software, and Microsoft Excel for Mac version 16.5.

After entering the data into an Excel spreadsheet, a professor at the LUTH audited the data. According to Shamoo (2013), data auditing helps to determine the degree of correspondence between published and original source data, ensuring that researchers produce reproducible, accurate, and verifiable results. The audited data were then imported into SPSS version 26 and Mplus 8.1 for analysis. Continuous variables were summarized using mean and standard deviation, while categorical variables were summarized using proportions for inferential statistics. A chi-squared test was used to assess the correlational proportions of nurse burnout or work disengagement to the servant leadership behavior of the nurse supervisor, with reference to the nurses who participated in the study. Multivariate analysis of variance (MANOVA) was used

to assess differences among servant leadership behavior as the independent variable, burnout: exhaustion and disengagement, and engagement: vigor, dedication, and absorption as the dependent variables.

The demographics of the study sample were also recorded. The data for the first five research questions were analyzed separately using Spearman's correlation coefficient. This analysis was validated by performing a Pearson correlation coefficient. Correlation coefficients were calculated among the seven servant leadership subscales: (a) emotional healing, (b) creating value for the community, (c) conceptual skills, (d) empowering, (e) helping subordinates grow and succeed, (f) putting subordinates first, and (g) behaving ethically; the two job burnout subscales: (a) exhaustion and (b) disengagement; and the three work engagement subscales: (a) vigor, (b) dedication, and (c) absorption. The data for the sixth research question were analyzed using MANOVA. However, a three-way ANOVA was also used to validate the results. Three one-way MANOVAs were conducted to test the effects of the overall organizational leadership approach (explicit endorsement of servant leadership by UNTH and non-explicit endorsement of servant leadership by UPTH and LUTH) on the dependent variables of Servant Leadership, Burnout, and Work Engagement. These validations were done to compare the results.

Reliability and Fit Indices of the Survey Scales

As mentioned earlier, this study utilized already developed and tested psychometric instruments. These tools have been proved to be reliable and valid for studies in different studies. However, they had not been used among the population from which the sample for the study was drawn. Therefore, this study examined the reliability and internal validity of the tools with reference to the study sample. Absolute and incremental fit indices were used to determine the model fit. The following standard combination of fit criteria was used during the confirmatory

factor analysis, to determine the acceptable model fit (Hooper et al., 2008): insignificant chi-square ($p > 0.05$) $CFI \geq 0.90$ and $SRMR \leq 0.09$ (and/or $WLSMV < 1$), $TLI \geq 0.90$ and $SRMR \leq 0.09$ (and/or $WLSMV < 1$), $RMSEA < 0.08$ and $SRMR \leq 0.09$ (and/or $WLSMV < 1$). The Mplus8.1 version of statistical was used to conduct the confirmatory factor analysis.

Further, this study reported the root mean square error of approximation (RMSEA), standardized root means square residual (SRMR), comparative fit index (CFI), and the non-normed fit index also known as the Tucker Lewis index (TLI), maximum likelihood estimator that estimates standard errors, and a mean-adjusted chi-square. These fit indices provided useful information to assess the fit of their structural equation models to their data that has been collected for analysis.

Table 1 below shows the Servant Leadership model fit: Chi-Square Test of Model Fit P-Value = .0134; RMSEA <=0.048 CFI = 0.985, TLI = 0.972, SRMR =0.024.

Table 1

Confirmatory factor analysis of Servant Leadership (SL) Scale

MODEL FIT INFORMATION SERVANT LEADERSHIP SCALE 7

Number of Free Parameters	24
Loglikelihood	
H0 Value	-6652.844
H1 Value	-6640.922
Information Criteria	
Akaike (AIC)	13353.689
Bayesian (BIC)	13454.743
Sample-Size Adjusted BIC	13378.566
(n* = (n + 2) / 24)	
Chi-Square Test of Model Fit	
Value	23.845
Degrees of Freedom	11
P-Value	0.0134
RMSEA (Root Mean Square Error of Approximation)	
Estimate	0.048
90 Percent C.I.	0.021 0.075
Probability RMSEA <= .05	0.497
CFI/TLI	
CFI	0.985
TLI	0.972
Chi-Square Test of Model Fit for the Baseline Model	
Value	902.076
Degrees of Freedom	21
P-Value	0.0000
SRMR (Standardized Root Mean Square Residual)	
Value	0.024

Table 1 is the confirmatory factor analysis of Servant Leadership (SL) Scale the model fit, the indices indicate that the overall, the model is good.

Table 2 below, shows the model fit information for the OLBI showed: Chi-Square Test of Model Fit P-Value = 0.000, RMSEA = .054, CFI = 0.0839, TLI = 0.0813, SRMR = 0.051.

Table 2

Confirmatory Factor analysis for OLBI

MODEL FIT INFORMATION OF OLDENBURG BURNOUT INVENTORY

Number of Free Parameters	49
Loglikelihood	
H0 Value	-4635.975
H1 Value	-4508.982
Information Criteria	
Akaike (AIC)	9369.950
Bayesian (BIC)	9576.270
Sample-Size Adjusted BIC	9420.742
($n^* = (n + 2) / 24$)	
Chi-Square Test of Model Fit	
Value	253.986
Degrees of Freedom	103
P-Value	0.0000
RMSEA (Root Mean Square Error of Approximation)	
Estimate	0.054
90 Percent C.I.	0.046 0.063
Probability RMSEA $\leq .05$	0.195
CFI/TLI	
CFI	0.839
TLI	0.813
Chi-Square Test of Model Fit for the Baseline Model	
Value	1060.547
Degrees of Freedom	120
P-Value	0.0000
SRMR (Standardized Root Mean Square Residual)	
Value	0.051

Table 2 is the Confirmatory Factor analysis for OLBI the indices from the data sample on OLBI. indicate that overall, the model is merely acceptable.

Table 3 is the model fit information for the UWES showed Chi-Square Test of Model Fit; P-Value = 0.000, RMSEA <= .105, CFI = 0.970, TLI =.955, SRMR =0.040 as seen in Table 3.

Table 3

Confirmatory Factor analysis for Utrecht Work Engagement Scale

MODEL FIT INFORMATION OF THE UTRECHT WORK ENGAGEMENT SCALE

Number of Free Parameters	70
Chi-Square Test of Model Fit	
Value	154.907*
Degrees of Freedom	24
P-Value	0.0000
RMSEA (Root Mean Square Error of Approximation)	
Estimate	0.105
90 Percent C.I.	0.089 0.121
Probability RMSEA <= .05	0.000
CFI/TLI	
CFI	0.970
TLI	0.955
Chi-Square Test of Model Fit for the Baseline Model	
Value	4407.348
Degrees of Freedom	36
P-Value	0.0000
SRMR (Standardized Root Mean Square Residual)	
Value	0.040
Optimum Function Value for Weighted Least-Squares Estimator	
Value	0.95515128D-
01	

Table 3 is the Confirmatory Factor analysis for Utrecht Work Engagement Scale, it indicates a good model, good to be used in analysis.

Confirmatory factor analysis was done individually for the nine items in the UWES (Schaufeli et al., 2013), the 16 items in the OLBI (Halbesleben & Demerouti, 2005), and the seven items in the SL scale. (Liden et al., 2015). This was done to determine the factor loadings of the three questionnaires, evaluate the measurement model, understand how the data fit the model, and test the research model, as we can see from the above fit indices.

In his seminal essay, Hu & Bentler (1999, p. 2) observed, the chi-squared value is the traditional measure for evaluating the overall model fit, and it assesses the magnitude of the discrepancy between the sample size and fitted covariances.” Further, a good model fit would be insignificant at the .05 threshold (Barrett, 2007). It is interesting to note that the chi-squares are significant across all three tools used in the study. This is because chi-square is sensitive to sample size (Bergh, 2015). Emphasizing this, Hooper et al. (2008) and Joreskog & Sorbom (1993) noted that the chi-square statistic nearly always rejects the model when large samples are used. The sample size of 498 used in this study was more than the size of 332, which the a priori calculation from G-power showed. It must be recalled how this study arrived at 332 as the sample. The G-power of the Pearson correlation coefficient gave a sample size of 82; the Spearman correlation gave a size of 84; we then added 84 to 82 and multiplied the total by two. The oversampling approach was used to get sufficient samples from the small units of the hospitals that may not have big number of nurses working in those units. This study had only 7 participants from the dental unit, 1 participant from Plastic and Reconstructive Surgery unit and 5 participants from Radiology. The oversampling was also used to reduce variances of key statistics of a target sub- population by increasing the targeted sample size disproportionately.

However, despite the significant Chi-square, the RMSEA was less than .08 in all the tools. According to extant literature, the RMSEA is the only fit index that is not greatly affected by sample size. Thus, the model for this study was accepted.

Reliability

According to Deng and Chan (2017), reliability measurements are key to social science research. Multiple reliability measures of the total score have been developed, including coefficient alpha, coefficient omega, the greatest lower bound reliability, and others. Among these, the coefficient alpha has been the most widely used, and is reported in most studies involving the measurement of a construct through multiple items of social and behavioral research. McNeish (2018) observed that Cronbach's alpha is a widely used measure of reliability used to quantify the amount of random measurement error that exists in a sum score, or the average generated by a multi-item measurement scale. The value of Cronbach's alpha is most often expressed between 0 and 1. However, sometimes, negative values do occur. If a negative value occurs, it typically means there is a problem with the dataset. Further, Tavakol, & Dennick, (2011) observed that an alpha score of .90 or higher means the consistency of the data is excellent. However, scores of .95 or higher can raise a red flag about the repetitiveness of the questions. A score between .80 and .89 means the consistency is good, and a score between .70 and .79 suggests that the consistency is acceptable. Any score below .50 is considered unacceptable (Taber, 2018). Cronbach's alpha in the study was validated using the McDonald's omega coefficient. Hayes et al. (2020) have suggested that the McDonald's omega coefficient is a better method to evaluate reliability, especially when using confirmatory factor analysis or structural equation modeling. McDonald's omega as a reliability coefficient resembles Cronbach's alpha. Hayes also observed that the primary advantage of McDonald's omega over

Cronbach's alpha is that the omega coefficient has the advantage of considering the strength of association between items. The confirmatory factor analysis also involved Bartlett's test of sphericity and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy. In Table 4, the Cronbach's alpha of .760 and McDonald's omega coefficient of .763 both show that the OLBI is reliable for the sample used in this study.

Table 4

Reliability of Oldenburg Burnout Inventory (OLBI)

Cronbach's alpha	.760
Kaiser-Meyer-Olkin measure of sampling adequacy	.830
Bartlett's test of sphericity approx. chi-square	987.861*
Omega coefficient	.763

Note. * $df = 120$, sig. = .000. at $p = 0.05$

In Table 5, Cronbach's alpha of .805 and Omega coefficient of .806, show that the SL Scale instrument can be reliably used in the study sample.

Table 5

Reliability of Servant Leadership (SL) Scale

Cronbach's alpha	.805
Kaiser-Meyer-Olkin measure of sampling adequacy	.846
Bartlett's test of sphericity approx. chi-square	987.861
Omega coefficient	.806

Note. * $df = 21$, sig. = .000. at $p = 0.05$

In table 6 the Cronbach's alpha of .711 and the Omega coefficient of .710 show the reliability of using the UWES on the study sample.

Table 6*Reliability of Utrecht Work Engagement Scale (UWES)*

Cronbach's alpha	.711
Kaiser-Meyer-Olkin measure of sampling adequacy	.860
Bartlett's test of sphericity approx. chi-square	1220.08
Omega coefficient	.710

Note. * $df = 36$, sig. = .000. at $p = 0.05$

Bartlett's test of sphericity examines the hypothesis that the correlation matrix is an identity matrix, which would indicate that the variables are unrelated and therefore suitable for structure detection. Further, the Kaiser-Meyer-Olkin measure of sampling adequacy is a statistic indicating the proportion of variance in the variables, which might be caused by underlying factors. Small values (< 0.05) of the significance level indicate that factor analysis may be useful for the data. High values (close to 1.0) generally indicate that factor analysis may be useful for the data. If the value is less than 0.50, the factor analysis results probably would not be very useful.

The study model consists of servant leadership: (emotional healing, creating value for the community, conceptual skills, empowering, helping subordinates grow and succeed, putting subordinates first, and behaving ethically), burnout: (exhaustion and disengagement), and employee engagement: (vigor, dedication, and absorption). The reliability of the model was evaluated by computing the omega coefficients. Mplus 8.1 was used to compute the omega coefficients. We can see from tables 1, 2, and 3 that the tools are valid. Having seen the reliability and the model fit information of the tools for the study.

Demographics

Socio-demographic Characteristics of Study Participants

Table 7 shows the socio-demographic characteristics of study participants. Most of the study participants were female (93.0%); the rest were male (7.0%). More than half of the study participants had a B.Sc. qualification in nursing (51.8%), while the maximum number of participants was aged between 30-39 years (37.6%). The mean age of the study participants was 40.36 ± 9.2 years. Among those participating in the study, the highest proportion had spent 6-10 years (26.5%), while the lowest had spent 16-20 years (12.0%) at work.

Table 7

Socio-demographic Characteristics of Study Participants

Variable	Frequency ($n = 498$)	Percentage	Mean \pm SD
Gender			
Male	35	7.0	
Female	463	93.0	
Age group (years)			40.36 ± 9.2
20-29	54	10.8	
30-39	187	37.6	
40-49	157	31.5	
≥ 50	100	20.1	
Name of workplace			
LUTH*	172	34.5	
ENUGU**	172	34.5	
Port-Harcourt***	154	30.9	
Highest educational qualification			
Registered nurse/midwife	205	41.2	
B.Sc.	258	51.8	
Masters	32	6.4	
Ph.D.	3	0.6	

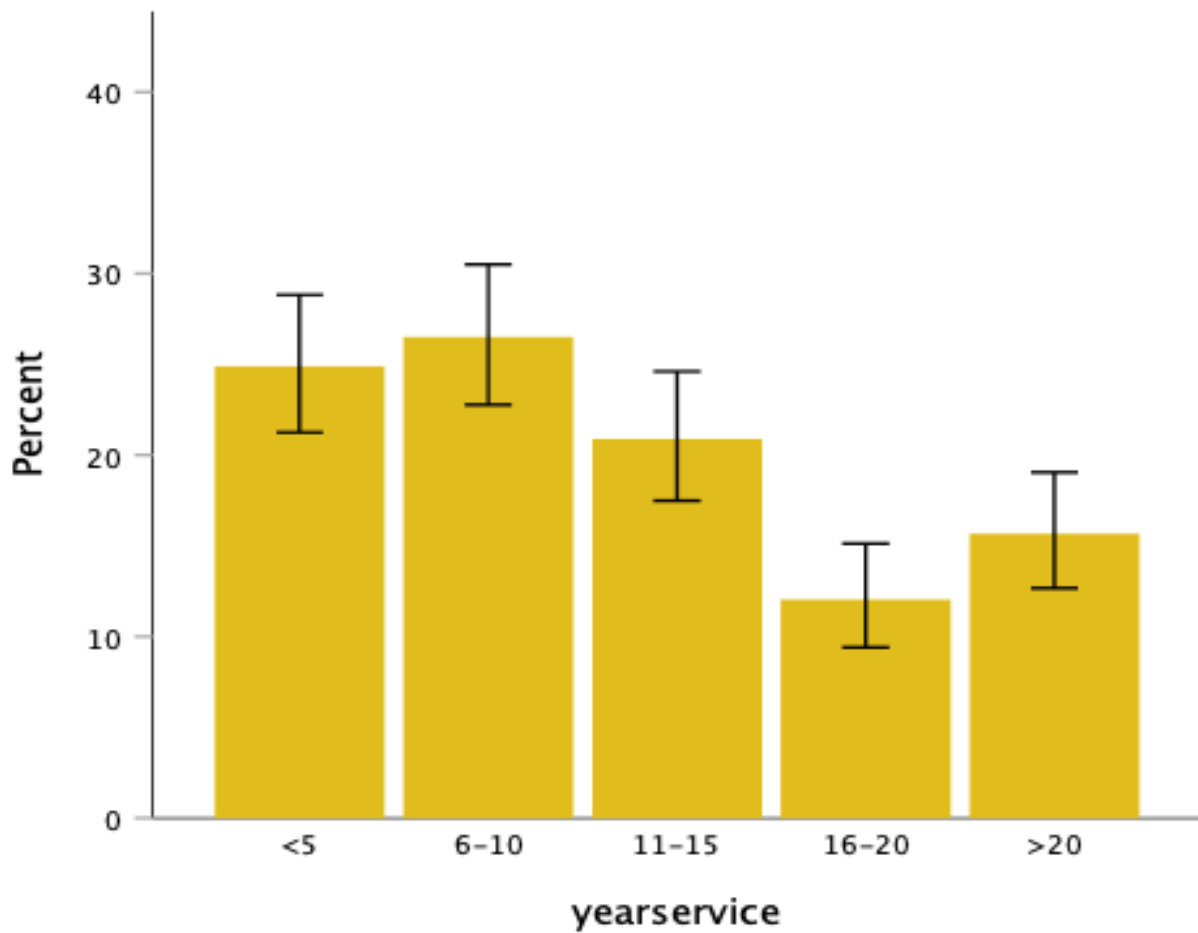
Note: *Lagos University Teaching Hospital; ** University of Nigeria Teaching Hospital Enugu; ***University of Port-Harcourt Teaching Hospital

Further, the number of years spent in service by the study participants is displayed in Figure 11, which shows that the highest proportion had spent 6-10 years (26.5%), while the lowest had spent 16-20 years (12.0%).

Figure 14

Years Spent in Service by Study Participants

Simple Bar Percent of yearservice



Error Bars: 95% CI

Note: Figure 14 showing years spent in service by study participants, those who have spent 6 to ten years are more in number than those who have spent 16 to 20 years.

Work Units of Participants

Table 8 shows the work units of the study participants. Most of the nurses involved in this study worked in the pediatrics department (17.7%), while the second-highest proportion worked in the obstetrics and gynecology department (16.3%). Only one nurse among those enrolled in this study worked in the plastic/reconstructive surgery department (0.2%).

Table 8

Work Units of Study Participants

Work Unit	Frequency ($n = 498$)	Percentage
Accident and emergency	26	5.2
Burns	11	2.2
Care of elderly	10	2.0
Dental	7	1.4
Ear, nose, and throat	11	2.2
Infection control	12	2.4
Medical unit	56	11.2
Neuropsychiatry	24	4.8
Obstetrics and gynecology	81	16.3
Orthopedics	18	3.6
Outpatient department	17	3.4
Ophthalmology	15	3.0
Pediatrics	88	17.7
Plastic/reconstructive surgery	1	0.2
Renal	15	3.0
Radiology and dialysis	5	1.0
Surgery	54	10.8
Others	47	9.4

Work Groups of Participants

Table 9 below displays the work groups of the study participants. These included: nursing officer 2 (11.2%), nursing officer 1 (19.1%), senior nursing officers (15.5%), and assistant chief nursing officers (17.7%), making up the highest proportion of participants, while the most senior cadres such as deputy directors of nursing (1.6%) and head of nursing services (0.6%) made up

the lowest proportion among those participating in the study. It is interesting to note that the nursing profession in Nigeria follows a different ranking system from that of the United States.

Table 9

Work Groups of Study Participants

	Frequency (<i>n</i> = 498)	Percentage
Head of nursing services	3	0.6
Deputy directors of nursing	8	1.6
Assistant director of nursing	56	11.2
Chief nursing officer	78	15.7
Assistant chief nursing officer	88	17.7
Principal nursing officer	37	7.4
Senior nursing officer	77	15.5
Nursing officer one	95	19.1
Nursing officer two	56	11.2

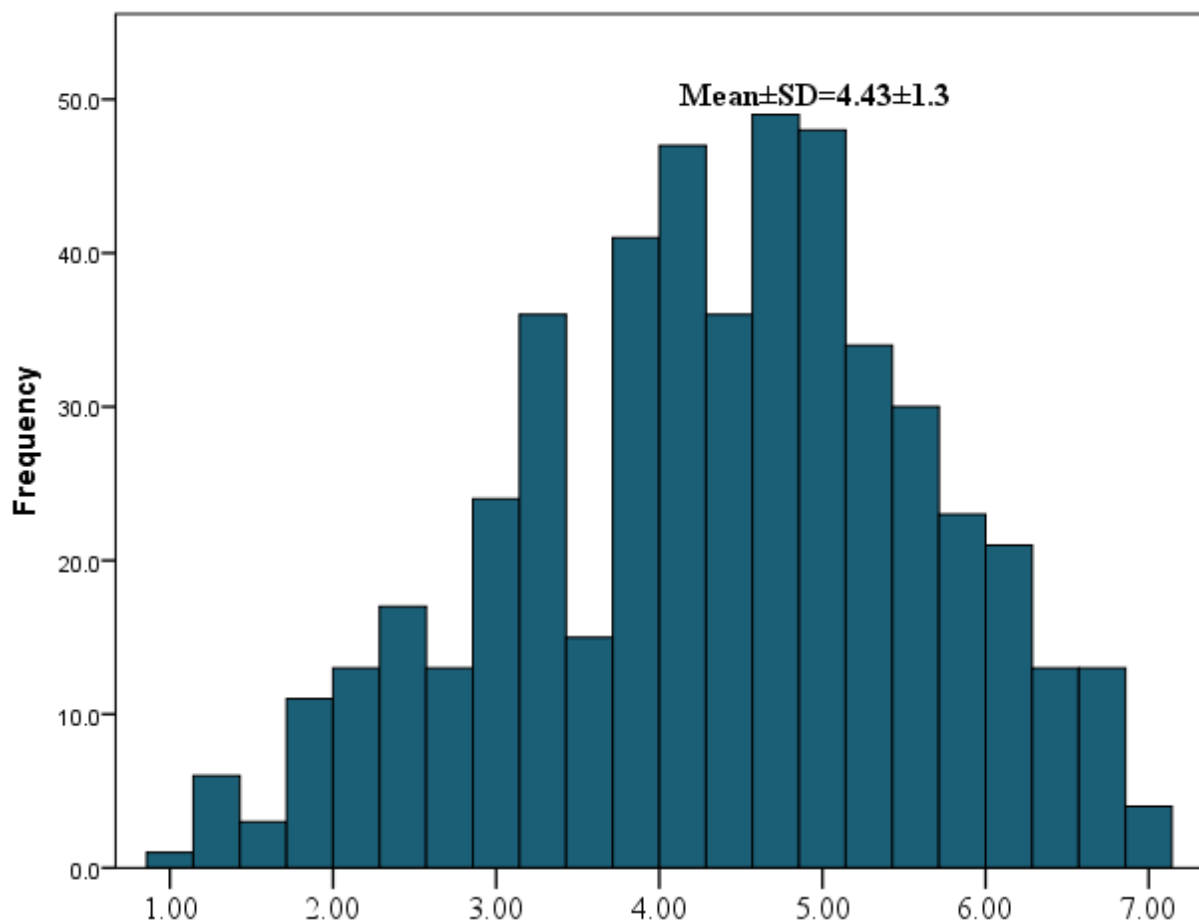
Statistical Test Assumptions

We will now examine the assumptions of the statistical tests used in the analysis of the study data. This is a correlational study. Spearman' Correlation Coefficients was used to assess the differences, since it meets the assumptions. According to Field (2013), assumptions that are made when using Spearman correlation coefficients in a study include the following: two variables that should be measured on an ordinal, interval, or ratio scale; two variables representing paired observations; and a monotonic relationship between two variables. Sullivan, & Artino,(2013) observed that the Likert scale uses ordinal numbering. Hence, we will use the Spearman correlation and validate the result using Pearson coefficient correlations. Further, we have two variables that we are measuring in each of the research questions trying to find the monotonic relationship. A monotonic relationship exists when either the variables increase or decrease in value together, or if the value of one variable decreases as that of the other increases. However, the only distributional assumption needed to be used descriptively is linearity. Correlational coefficients assume that the relation among variables can be described using a

straight line. The most direct way to determine linearity is to look at the scatterplot. We will use Spearman correlation to determine the degree to which the relationship is monotonic. Spearman correlation is a rank-based correlation measure; it is non-parametric and does not rest upon an assumption of normality. However, since the result will be validated by using the Pearson correlation coefficient, which is a parametric measure that requires normal distribution, this study also looked at the distribution of the sample on each of the measuring tools, so that the results can be compared.

Figure 15

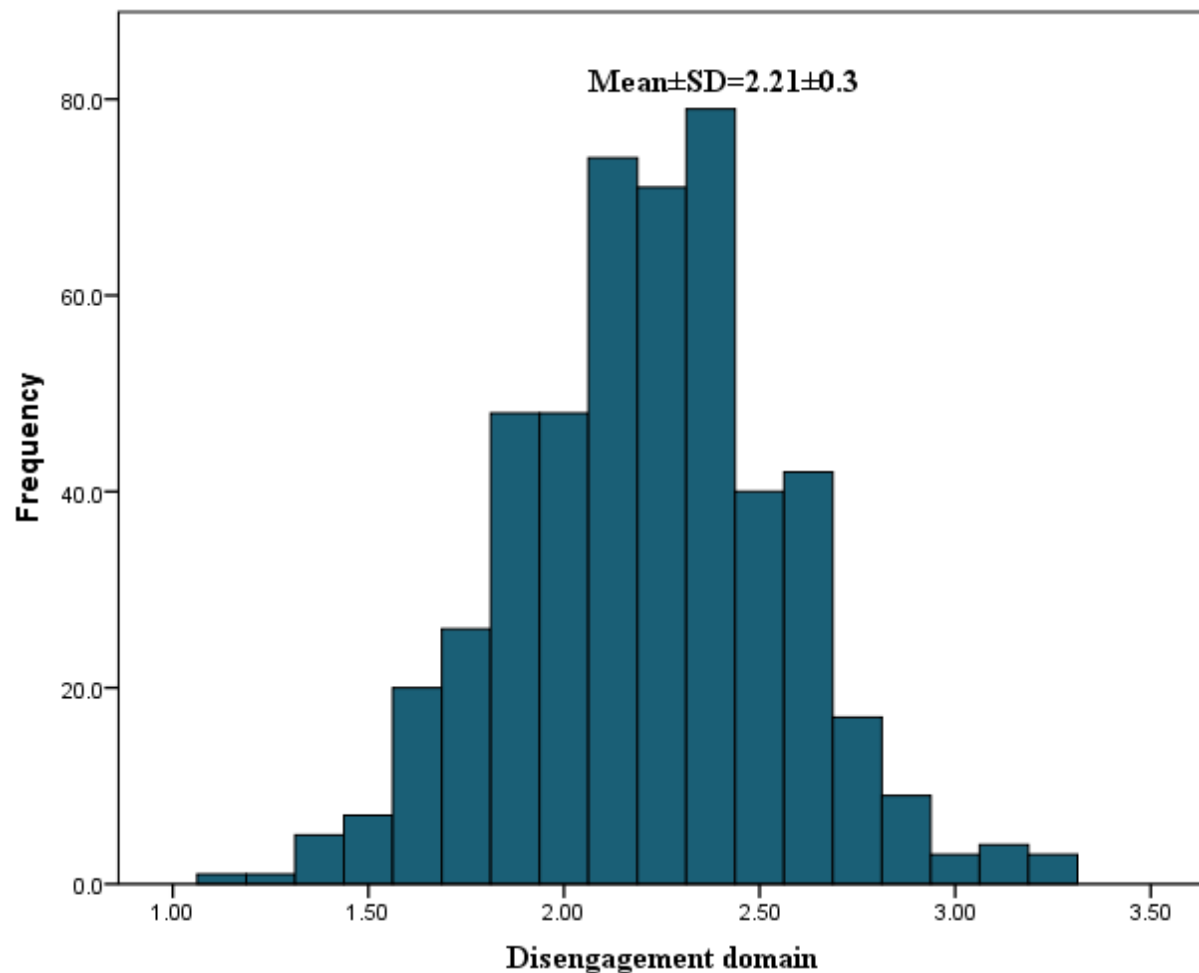
Distribution of the Overall Servant Leadership (SL) Scale Scores



Note: Figure 15 is not a normal distribution. It is skewed to the right. The participants rated their supervisors on the SL Scale from 1.0 to 7.0, with a mean score of 4.43 ± 1.3 . The highest proportion of respondents had a score of 2.4. The importance of the distribution figure lies in the fact that, visually, the participants in the study have rated the supervisor's servant leadership behavior high. Most of the ratings lie between 4.0 to 7.0. This is good for the study; we see more of this in the categories within the figure that follows.

Figure 16

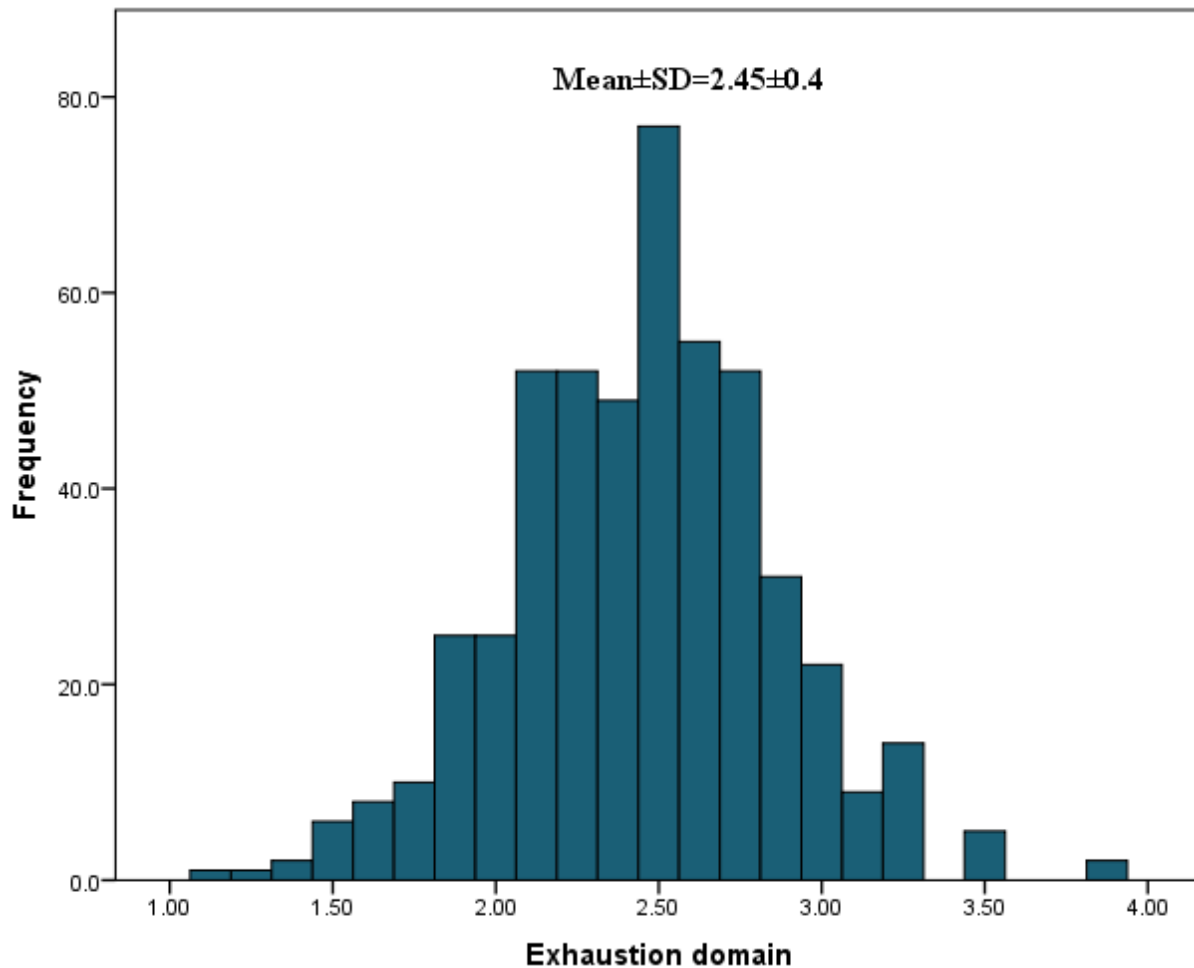
Distribution of Disengagement Domain Scores for the Oldenburg Burnout Inventory (OLBI)



Note: Figure 16 is almost a normal is almost a normal distribution. Though it is skewed to the left. The participants' scores on the disengagement domain for the OLBI ranged from 1.1 to 3.2, with a mean score of 2.21 ± 0.3 . The highest proportion of respondents had a score of 2.4.

Figure 17

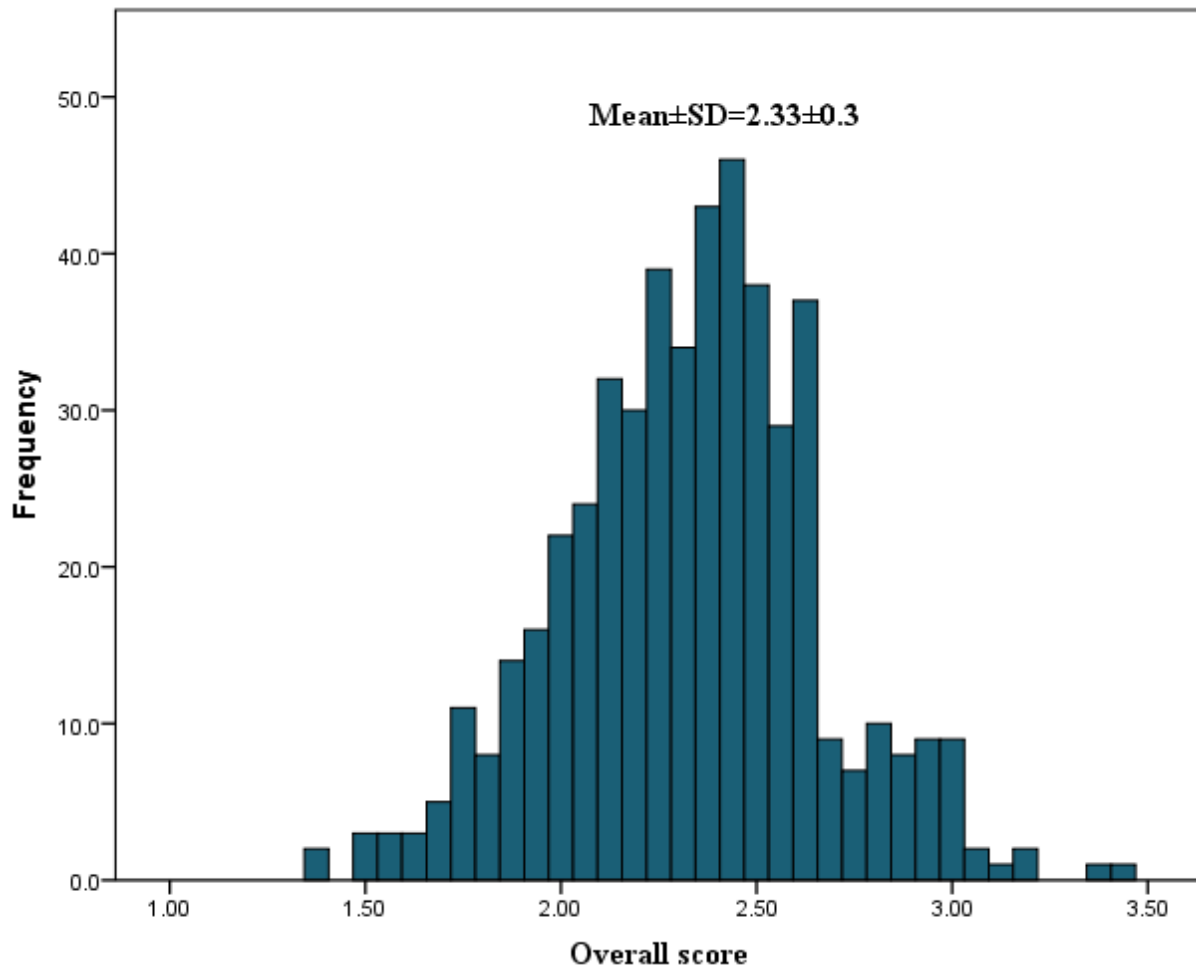
Distribution of Exhaustion Domain Scores for the Oldenburg Burnout Inventory (OLBI)



Note: Figure 17 seems to be a normal distribution. The participants' scores on the exhaustion domain for the OLBI ranged from 1.1 to 3.8, with a mean score of 2.45 ± 0.4 . The highest proportion of respondents had a score of 2.5. This figure is important, because visually speaking, we can say that those whose exhaustion is between 3.5 and 4.0 seem to be outliers.

Figure 18

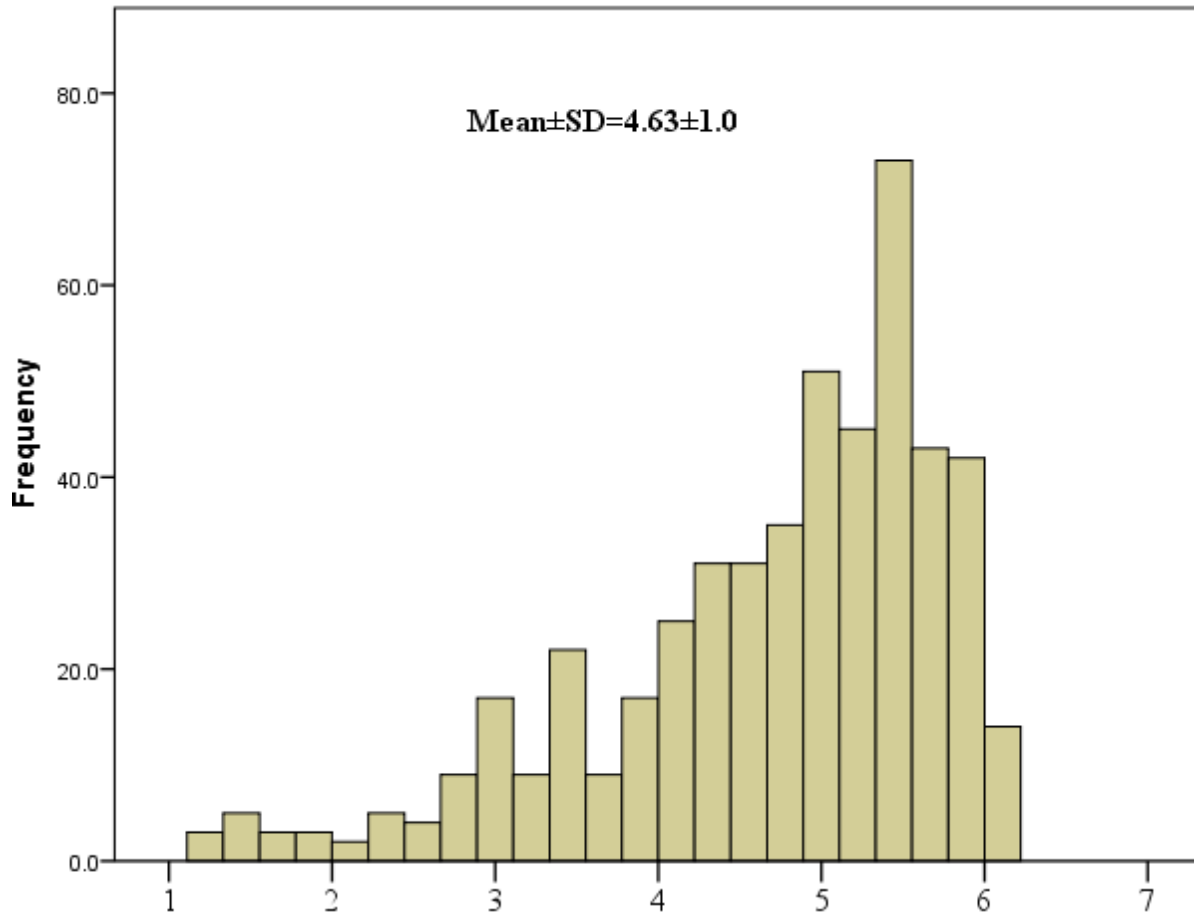
Distribution of the Overall Oldenburg Burnout Inventory (OLBI) Scores



Note: Figure 18 does not show a normal distribution. It is skewed to the left. The participants' scores on the OLBI ranged from 1.4 to 3.4, with a mean score of 2.33 ± 0.3 . The highest proportion of respondents had a score of 2.4. We can also infer from the figure above that, based on the OLBI, most of the participants seem to have a burnout rate of less than 2.5. This can be considered a low burnout rate. This overall distribution will help us to carry out a comparative analysis of the overall burnout score in our sample with burnout scores in other studies.

Figure 19

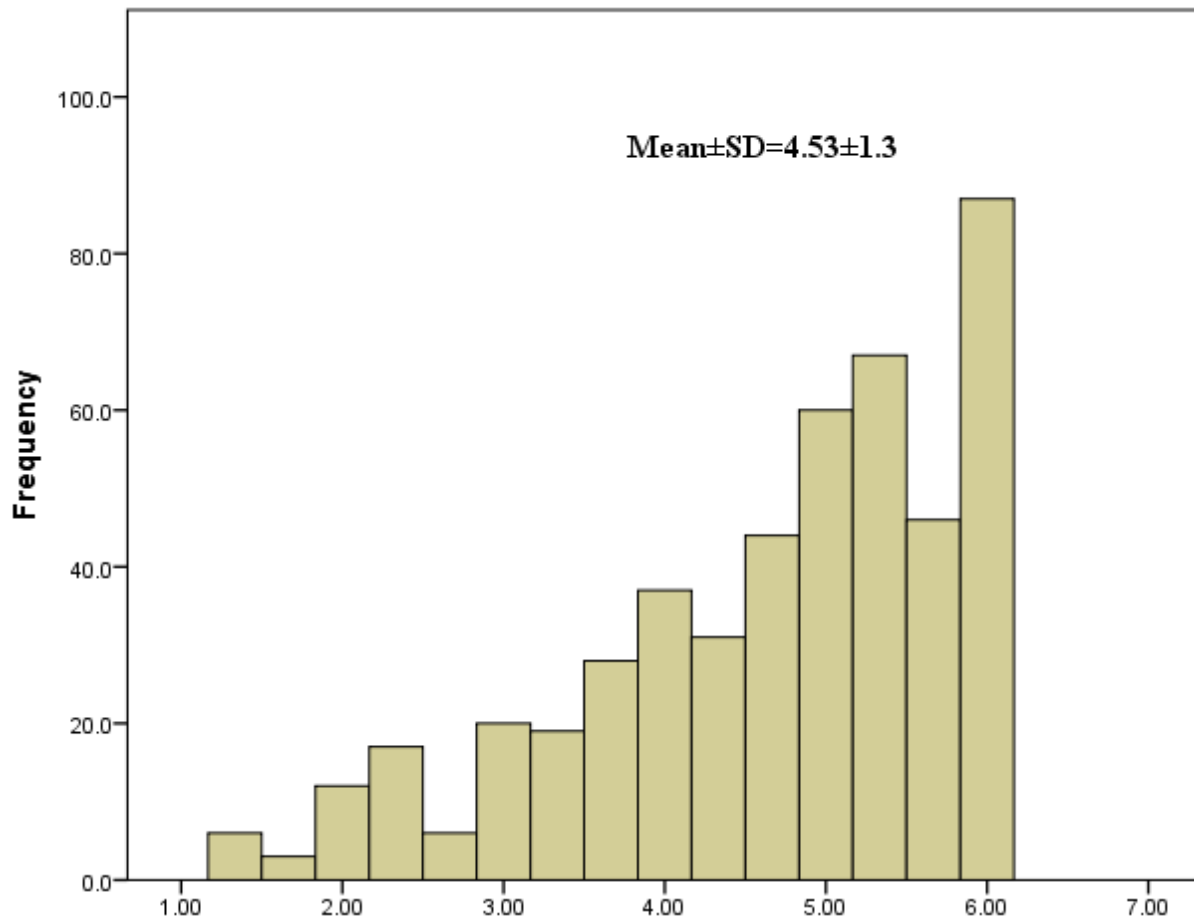
Distribution of Overall UWES Scores of Participants



Note: Figure 19 is not a normal distribution. It is skewed to the right. The participants' scores on the UWES ranged from 1.2 to 6.2, with a mean score of 4.63 ± 1.0 . The highest proportion of respondents had a score of 5.4. Based on the figure, we can infer that most of the participants seem to be engaged.

Figure 20

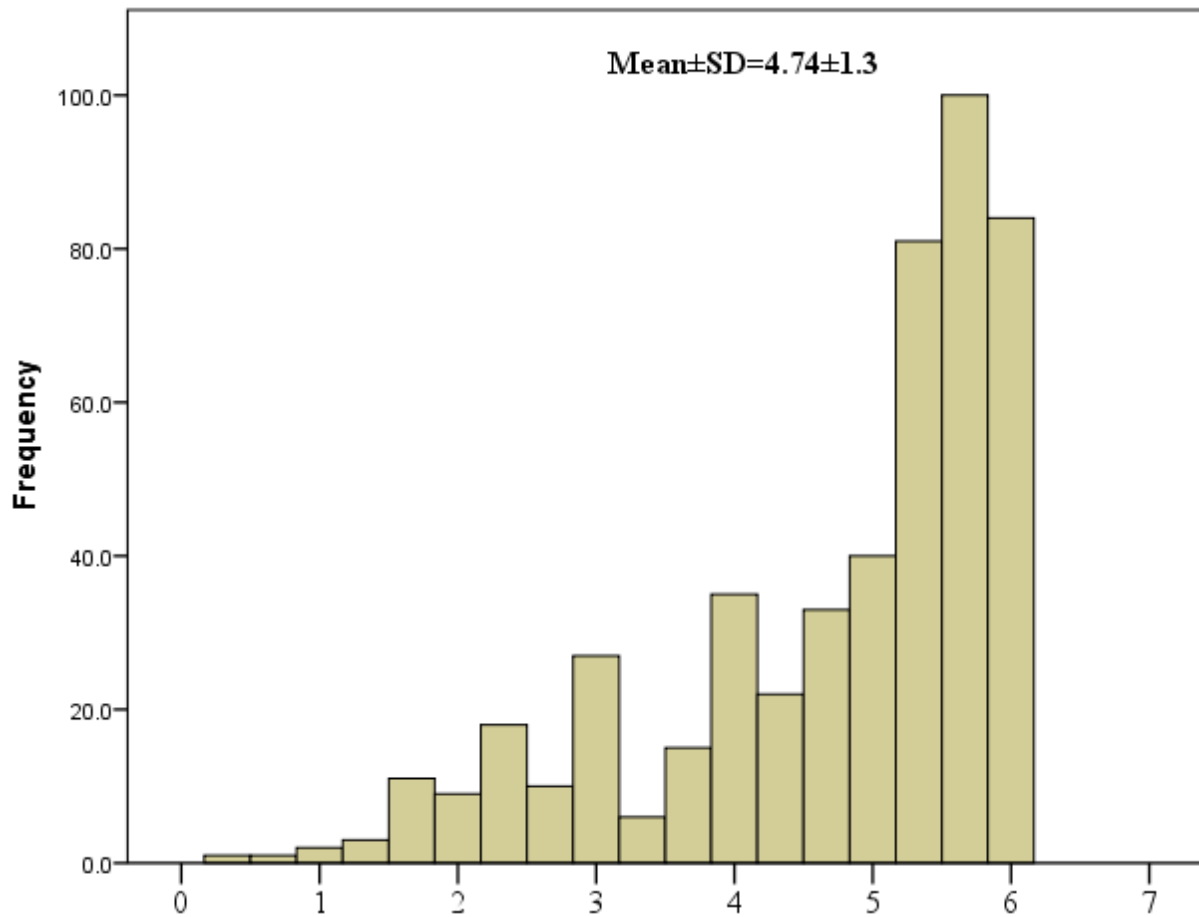
Distribution of Vigor Component Scores of the UWES of Participants



Note: Figure 20 is not a normal distribution. The histogram is skewed to the right. The participants' scores on the vigor component of the UWES ranged from 1.25 to 6, with a mean score of 4.43 ± 1.3 . The highest proportion of respondents had a score of six. Based on the distribution above, it can be said that most of the study participants demonstrate vigor at work.

Figure 21

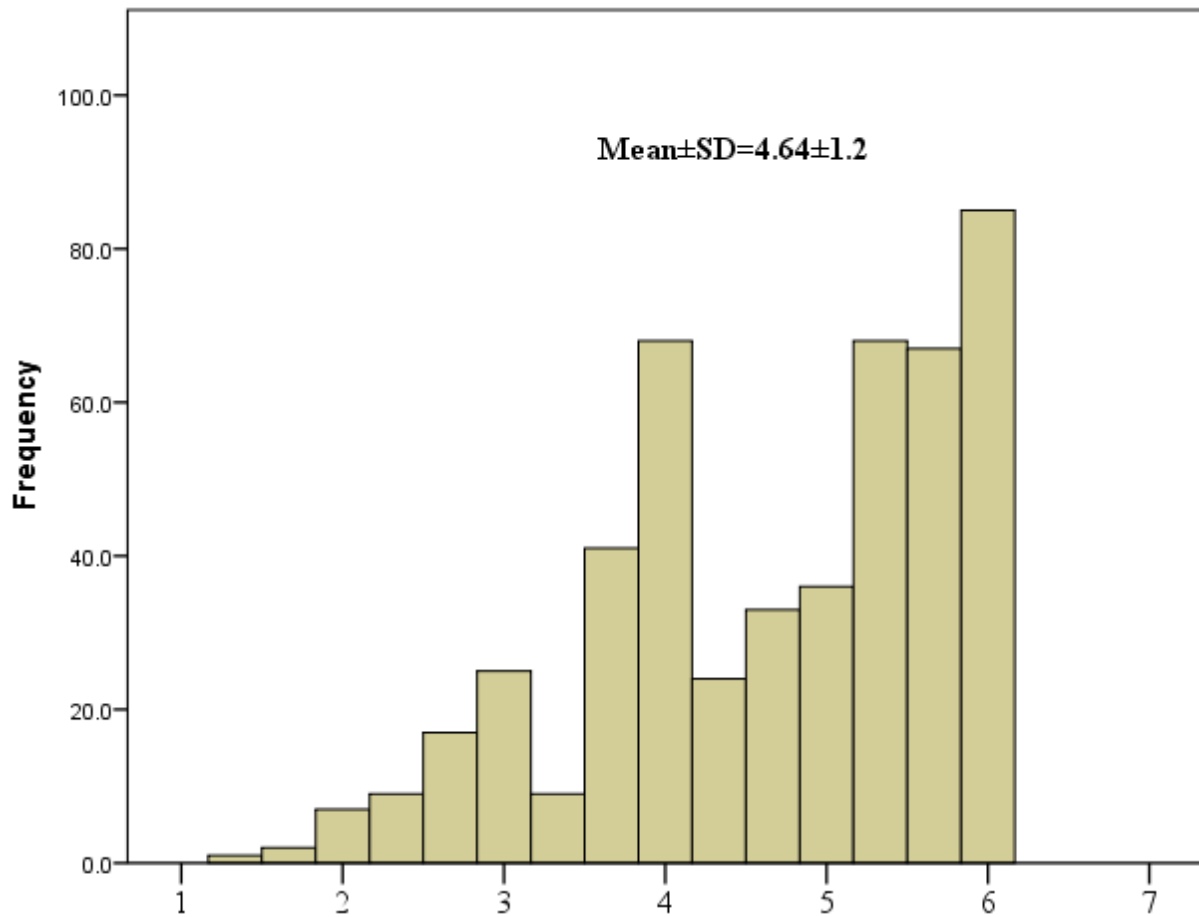
Distribution of Dedication Component Scores of the UWES of Participants



Note: Figure 21 shows that this is not a normal distribution. histogram is skewed to the right. The participants' scores on the dedication component of the UWES ranged from 0.3 to 6, with a mean score of 4.74 ± 1.3 . The highest proportion of respondents had a score of six. Based on the figure, it can be said that the employees who participated in the study seemingly had a lot of dedication to their job, as the data seems to be skewed to the right. This distribution will help us examine how the score of work engagement in our sample compares to the work engagement score in other studies.

Figure 22

Distribution of Absorption Component Scores of the UWES of Participants



Note: Figure 22 is not a normal distribution. The participants' scores on the absorption component of the UWES ranged from 1.4 to 6, with a mean score of 4.64 ± 1.2 . The highest proportion of respondents had a score of six. Based on the above figure, it seems that most of the study participants are absorbed in their work, as the figure is skewed to the right. Based on the above figures, visually it is obvious that the data is not normally distributed across any of the measuring instruments. We will now look at the bivariate association between the mean scores of various measuring instruments and the socio-demographic characteristics of study participants.

Table 10

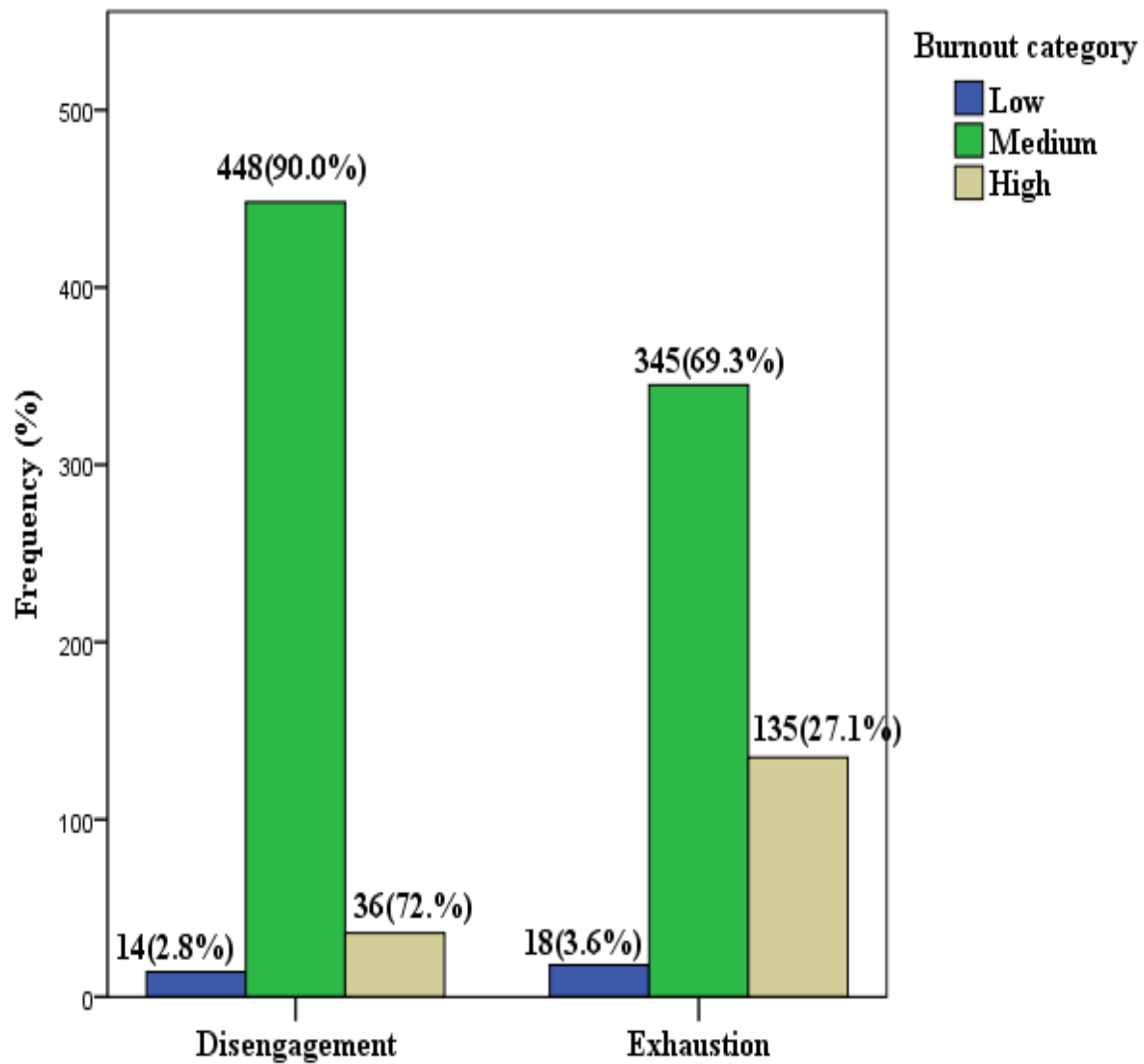
Bivariate Association between the mean Oldenburg Burnout Inventory (OLBI) Scores and Socio-demographic Characteristics of Study Participants

Variable	Disengagement Mean \pm SD	Exhaustion Mean \pm SD	Overall Mean \pm SD
Gender			
Male	2.27 \pm 0.3	2.56 \pm 0.4	2.41 \pm 0.3
Female	2.21 \pm 0.4	2.44 \pm 0.4	2.32 \pm 0.3
p-value	0.309	0.104	0.119
Age group (years)			
20-29	2.36 \pm 0.4	2.50 \pm 0.3	2.43 \pm 0.3
30-39	2.21 \pm 0.3	2.44 \pm 0.4	2.32 \pm 0.3
40-49	2.21 \pm 0.3	2.48 \pm 0.4	2.34 \pm 0.3
≥ 50	2.15 \pm 0.4	2.41 \pm 0.4	2.28 \pm 0.3
p-value	0.004*	0.441	0.047*
Name of workplace			
LUTH	2.21 \pm 0.4	2.45 \pm 0.4	2.33 \pm 0.3
ENUGU	2.23 \pm 0.3	2.54 \pm 0.4	2.38 \pm 0.3
Port-Harcourt	2.20 \pm 0.3	2.35 \pm 0.4	2.27 \pm 0.3
p-value	0.677	<0.001*	0.010*
Highest educational qualification			
Registered nurse/midwife	2.18 \pm 0.3	2.40 \pm 0.4	2.29 \pm 0.3
B.Sc.	2.23 \pm 0.3	2.49 \pm 0.4	2.36 \pm 0.3
Masters	2.36 \pm 0.4	2.47 \pm 0.5	2.42 \pm 0.4
Ph.D.	2.20 \pm 0.4	2.50 \pm 0.2	2.35 \pm 0.3
p-value	0.032*	0.155	0.049*
Years in service			
≤ 5	2.26 \pm 0.4	2.45 \pm 0.4	2.35 \pm 0.4
6-10	2.22 \pm 0.3	2.43 \pm 0.4	2.33 \pm 0.3
11-15	2.19 \pm 0.3	2.47 \pm 0.4	2.33 \pm 0.3
16-20	2.20 \pm 0.3	2.50 \pm 0.4	2.35 \pm 0.3
>20	2.17 \pm 0.4	2.41 \pm 0.4	2.29 \pm 0.4
p-value	0.352	0.669	0.696

Note: In Table 10 above, younger study participants aged 20-29 years had significantly higher mean disengagement (2.36 \pm 0.4) and burnout scores (2.43 \pm 0.3). Similarly, respondents working in Enugu had significantly higher mean exhaustion (2.54 \pm 0.4) and burnout scores (2.38 \pm 0.3). In the case of educational qualifications, those with a master's degree had the highest mean disengagement scores (2.36 \pm 0.4).

Figure 23

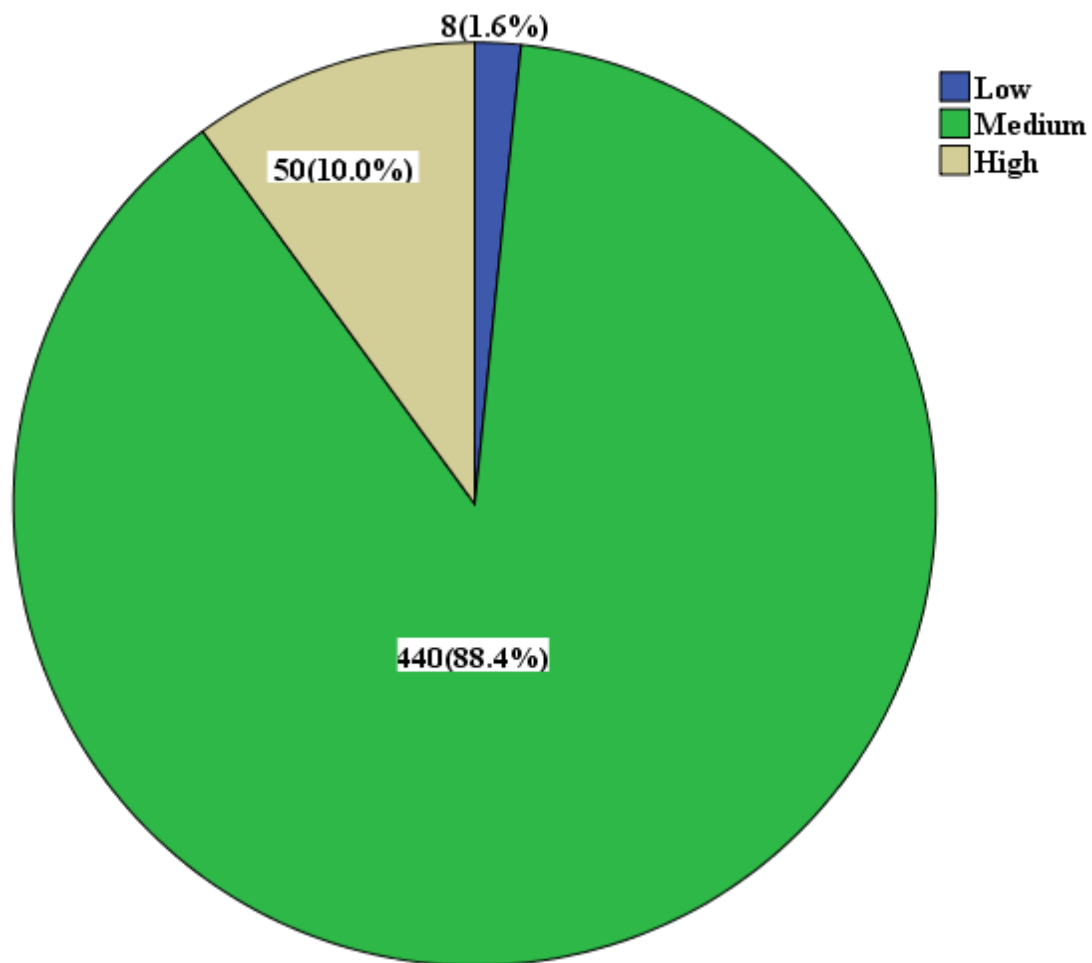
Level of Disengagement and Exhaustion among Study Participants



Note. Figure 23 shows the distribution of disengagement and exhaustion among the study participants. Most were moderately disengaged (90.0%) and exhausted (69.3%).

Figure 24

Level of Burnout among Study Participants



Note. Figure 24 shows the level of burnout among the study participants. Most of them had a moderate level of burnout (88.4%).

Table 11

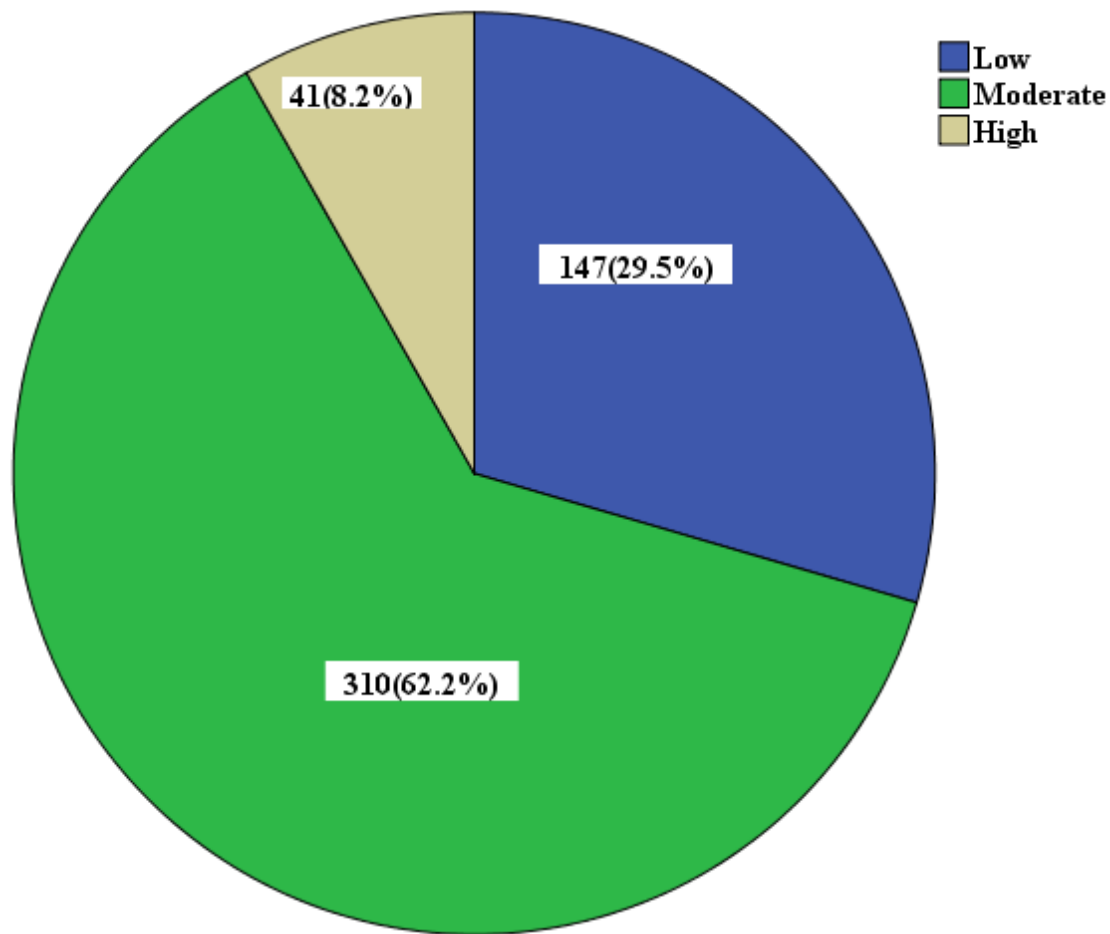
Bivariate Association between the Mean of Servant Leadership Scores Attributed to Supervisors and the Socio-demographic Characteristics of the Participants

	Mean \pm SD	p-value
Gender		0.740
Male	4.36 \pm 1.1	
Female	4.43 \pm 1.3	
Age group (years)		0.802
20-29	4.41 \pm 1.2	
30-39	4.37 \pm 1.3	
40-49	4.44 \pm 1.2	
≥ 50	4.53 \pm 1.4	
Name of workplace		0.153
LUTH	4.33 \pm 1.4	
ENUGU	4.38 \pm 1.2	
Port-Harcourt	4.59 \pm 1.2	
Highest educational qualification		0.271
Registered nurse/midwife	4.39 \pm 1.3	
B.Sc.	4.42 \pm 0.1	
Masters	4.70 \pm 1.3	
Ph.D.	5.52 \pm 1.2	
Years in service		0.029*
≤ 5	4.14 \pm 1.2	
6-10	4.54 \pm 1.3	
11-15	4.36 \pm 1.2	
16-20	4.65 \pm 1.2	
> 20	4.61 \pm 1.4	

Note: Table 11, years spent in service was the only variable significantly associated with rating supervisors having higher servant leadership qualities. Also, participants who had spent 16-20 years in service were more likely to rate their supervisors highly (4.65 \pm 1.2).

Figure 25

Servant Leadership (SL) Scale Categories as Assessed by Participants



Note: Figure 25 shows the servant leadership qualities of supervisors as assessed by the study participants. Most supervisors were deemed to have a moderate level of servant leadership qualities (62.2%).

Table 12

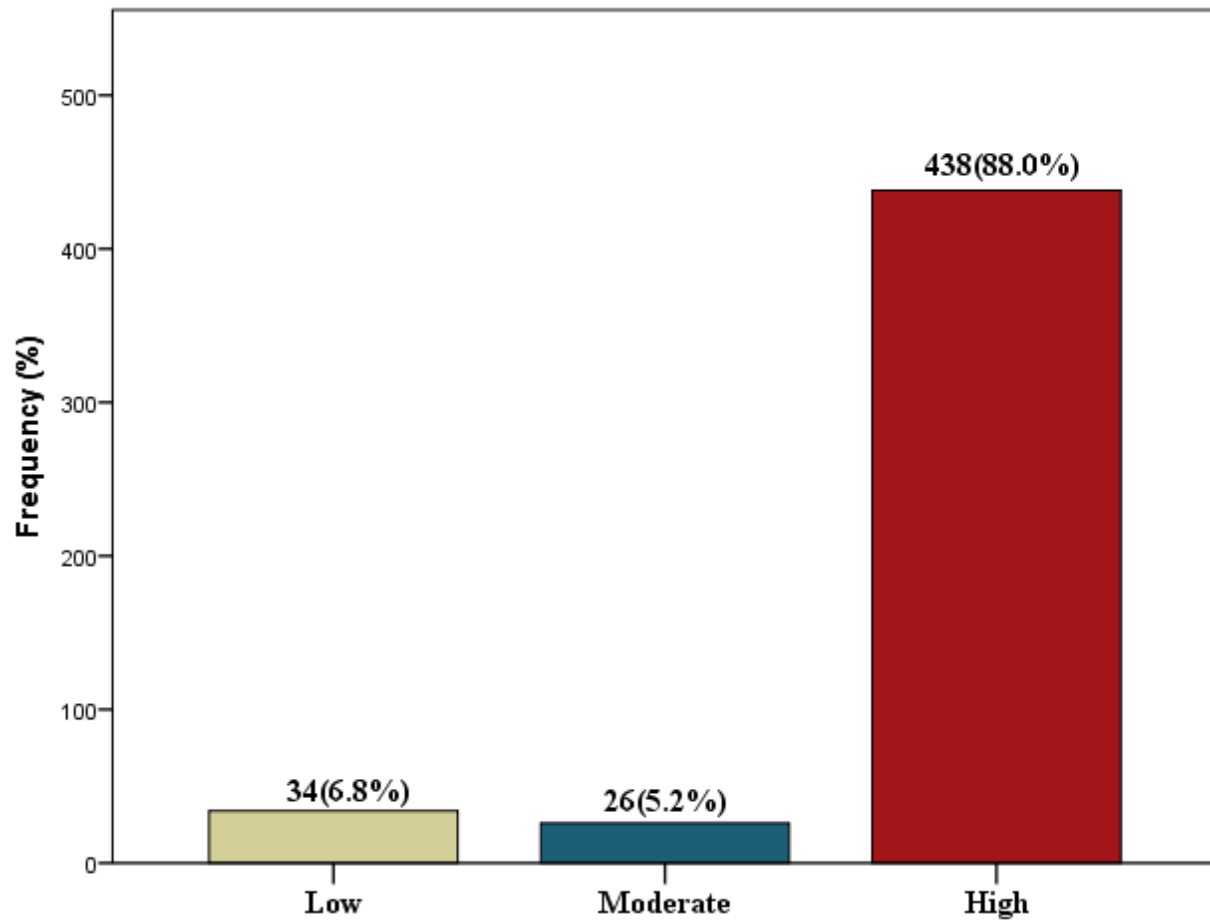
Bivariate Association between the Mean UWES Scores and Socio-demographic Characteristics of the Participants

Variable	Vigor Mean \pm SD	Dedication Mean \pm SD	Absorption Mean \pm SD	Overall Mean \pm SD
Gender				
Male	4.23 \pm 1.4	4.50 \pm 1.2	4.48 \pm 1.1	4.47 \pm 1.0
Female	4.54 \pm 1.3	4.76 \pm 1.3	4.65 \pm 1.2	4.65 \pm 1.0
p-value	0.642	0.239	0.414	0.325
Age group (years)				
20-29	4.47 \pm 1.5	4.38 \pm 1.4	4.56 \pm 1.2	4.47 \pm 1.2
30-39	4.52 \pm 1.4	4.81 \pm 1.2	4.63 \pm 1.1	4.66 \pm 1.0
40-49	4.46 \pm 1.2	4.61 \pm 1.3	4.53 \pm 1.2	4.54 \pm 1.0
≥ 50	4.69 \pm 1.3	4.99 \pm 1.2	4.84 \pm 1.3	4.84 \pm 1.1
p-value	0.604	0.014*	0.228	0.083
Name of workplace				
LUTH	4.48 \pm 1.4	4.71 \pm 1.3	4.82 \pm 1.2	4.67 \pm 1.1
ENUGU	4.35 \pm 1.3	4.52 \pm 1.4	4.47 \pm 1.3	4.81 \pm 0.9
Port-Harcourt	4.78 \pm 1.3	5.02 \pm 1.0	4.62 \pm .1	4.44 \pm 1.1
p-value				
Highest educational qualification				
Registered nurse/midwife	4.67 \pm 1.4	4.92 \pm 1.1	4.74 \pm 1.2	4.78 \pm 1.0
B.Sc.	4.38 \pm 1.3	4.58 \pm 1.3	4.53 \pm 1.2	4.50 \pm 1.0
Masters	4.77 \pm 1.5	4.78 \pm 1.3	4.68 \pm 1.1	4.74 \pm 1.1
Ph.D.	5.56 \pm 0.5	5.11 \pm 1.9	5.22 \pm 1.1	5.30 \pm 0.4
p-value	0.045*	0.038*	0.247	0.023*
Years in service				
≤ 5	4.49 \pm 1.5	4.62 \pm 1.3	4.60 \pm 1.2	4.57 \pm 1.1
6-10	4.53 \pm 1.3	4.76 \pm 1.2	4.61 \pm 1.2	4.63 \pm 1.0
11-15	4.36 \pm 1.4	4.54 \pm 1.4	4.37 \pm 1.3	4.43 \pm 1.2
16-20	4.46 \pm 1.3	4.64 \pm 1.3	4.74 \pm 1.2	4.61 \pm 1.0
>20	4.87 \pm 1.1	5.22 \pm 0.9	4.99 \pm 1.0	5.03 \pm 0.8
p-value	0.142	0.004*	0.012*	0.003*

Note: Table 12, study participants with doctorates had significantly higher mean vigor (5.56 \pm 0.5) and dedication scores (5.11 \pm 1.9) as well as overall work engagement scores (5.30 \pm 0.4). Similarly, respondents who had spent >20 years in service had significantly higher mean dedication (5.22 \pm 0.9) and absorption scores (4.99 \pm 1.0) as well as the highest mean overall scores (5.03 \pm 0.8).

Figure 26

Overall Utrecht Work Engagement Scale (UWES) Categories of Participants



Note. In figure 26 Most of the study participants had a high level of work engagement (88.0%).

Having seen the bivariate association between the mean scores of the measuring instruments and socio-demographic characteristics of the study participants, we will now examine the scatterplots and analyze the monotonic relationship between two variables. This will help us to answer the research questions.

Criteria for Calculation of Test Results

Spearman's correlation coefficient was calculated and validated using Pearson's correlation coefficient. Spearman's coefficient was used, because it is the test statistic that

measures the statistical relationship, or association, between two ordinal variables. According to the extant literature, it is known as the best method of measuring the association among variables of interest. It is based on the method of covariance and gives information about the magnitude of the association, or correlation, and the direction of the relationship. The data gathered for the study met the assumptions of Spearman's correlation coefficient. The assumptions are independent of the case and a linear relationship. The data was assessed using a scatterplot. For homoscedasticity, the scatterplot of the residuals was roughly rectangular. According to Parke (2013), coefficient values can range from +1 to -1, where +1 indicates a perfect positive relationship, -1 indicates a perfect negative relationship, and 0 indicates no relationship exists. If the value is near ± 1 , it is a perfect correlation; as one variable increases, the other variable also tends to increase (if positive) or decrease (if negative). It is a strong correlation if the coefficient value lies between ± 0.50 and ± 1 . If the value lies between ± 0.30 and ± 0.49 , it is a moderate medium correlation. When the value lies below + or -.29, it is a small correlation. There is no correlation when the value is zero.

Answers to Research Questions

RQ1: Spearman Correlations Validated using Pearson Correlations

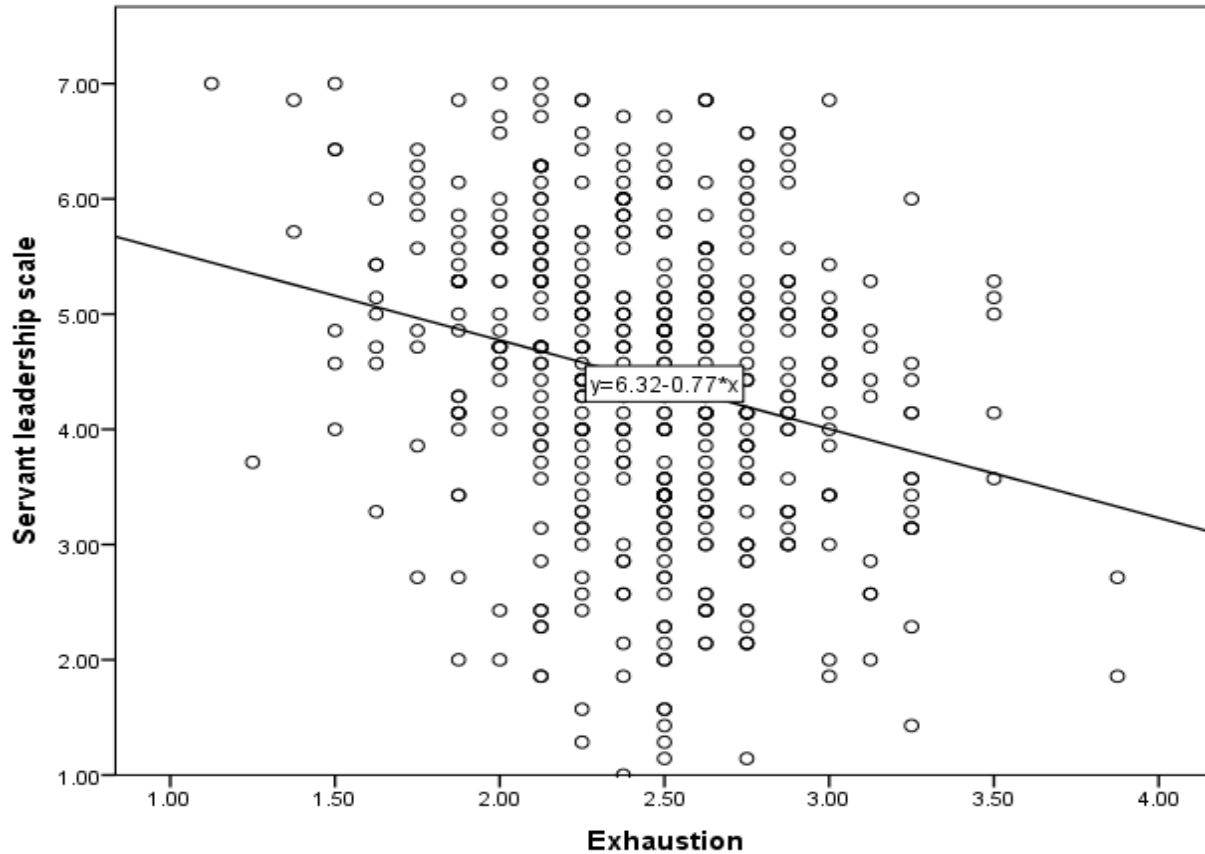
RQ1: Is there a significant relationship between the employee's perceptions of the servant leadership behavior of the supervisor and the employee's self-rating of exhaustion?

H0: There is no significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of exhaustion.

HA: There is a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of exhaustion.

Figure 27

Correlation between Servant Leadership (SL) Scale and Exhaustion (Subdomain of Oldenburg Burnout Scale)



Note. Pearson correlation = -0.248 , $p < 0.001^*$ Spearman correlation = -0.241 , $p < 0.001^*$

Figure 27 shows that the data points start at high y-values on the y-axis and progress down to low values; this means that the variables have a negative correlation. However, there is a small negative correlation between the SL scale and exhaustion among the study participants. Using linear regression analysis, the correlation of servant leadership with exhaustion was found to be -0.241 , $p < 0.001^*$. The linear relationship between the two is described by the equation $y = 6.32 - 0.77x$. The line of best fit is slanting right, although the data points seemed to be too scattered for a strong negative correlation. Therefore, we rejected the null hypothesis and failed to reject the alternative.

RQ2: Spearman Correlations Validated using Pearson Correlations

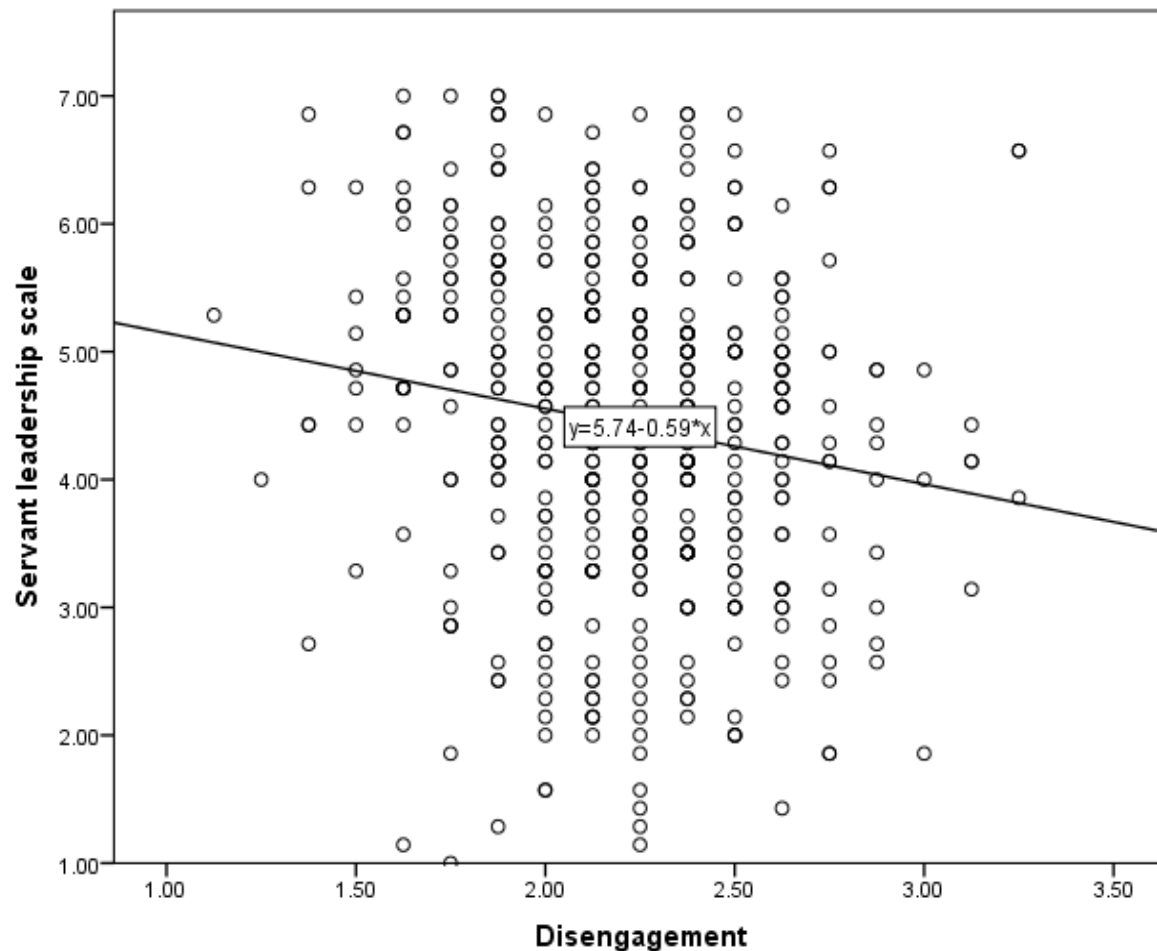
RQ2: Is there a significant relationship between the employee's perceptions of the servant leadership behavior of the supervisor and the employee's self-rating of disengagement?

H0: There is no significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of disengagement.

HA: There is a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of disengagement.

Figure 28

Correlation between Servant Leadership (SL) Scale and Disengagement (Subdomain of Oldenburg Burnout Scale)



Note. Pearson correlation = -0.160 , $p < 0.001^*$ Spearman correlation = -0.178 , $p < 0.001^*$

Figure 28 shows that the data points start at high y-values on the y-axis and progress down to low values; this means that there is a negative correlation between the SL scale and disengagement, which is a subset of burnout. The line of best fit seems to be slanting right. Using linear regression analysis, the correlation between servant leadership and disengagement was found to be 0.178 , $p < 0.001^*$. The linear relationship between the two is described by the equation $y = 5.74 - 0.59x$. The data points seem to be clustered at the center of the graph. It seems that the employees felt slightly less disengaged. This is a small negative correlation. However, we rejected the null hypothesis and failed to reject the alternative hypothesis.

RQ3: Spearman Correlations Validated using Pearson Correlations

RQ3: Is there any significant relationship between the employee's perception of the servant

leadership behavior of the supervisor and the employee's self-rating of vigor?

H0: There is no significant relationship between the employee's perception of the servant

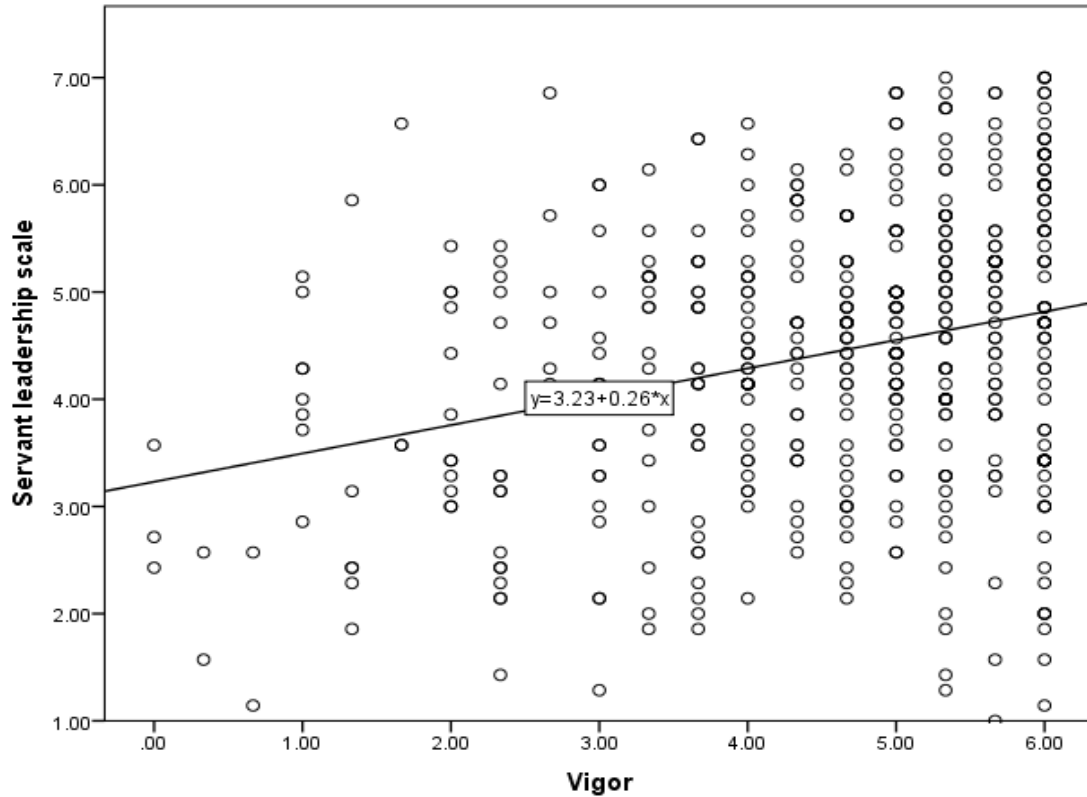
leadership behavior of the supervisor and the employee's self-rating of vigor.

HA: There is a significant relationship between the employee's perception of the servant

leadership behavior of the supervisor and the employee's self-rating of vigor.

Figure 29

Correlation between Servant Leadership (SL) Scale and Vigor (Utrecht Work Engagement Subdomain)



Note. Pearson correlation = 0.279, $p < 0.001^*$ Spearman correlation = 0.246, $p < 0.001^*$

The figure29 shows a slight positive correlation between the SL scale and vigor, which is a subset of work engagement. Using linear regression analysis, the correlation between servant leadership and vigor was found to be 0.246, $p < 0.001^*$. The linear relationship between the two is described by the equation $y = 3.23 + 0.26x$. Although the data points are too scattered, the line of best fit seems to be slanting left and the data points form a straight line going from near the origin out to high y-values. This means that servant leadership and vigor have a positive correlation. Yet, this was a small positive correlation. However, we rejected the null hypothesis and failed to reject the alternative hypothesis.

RQ4: Spearman Correlations Validated using Pearson Correlations

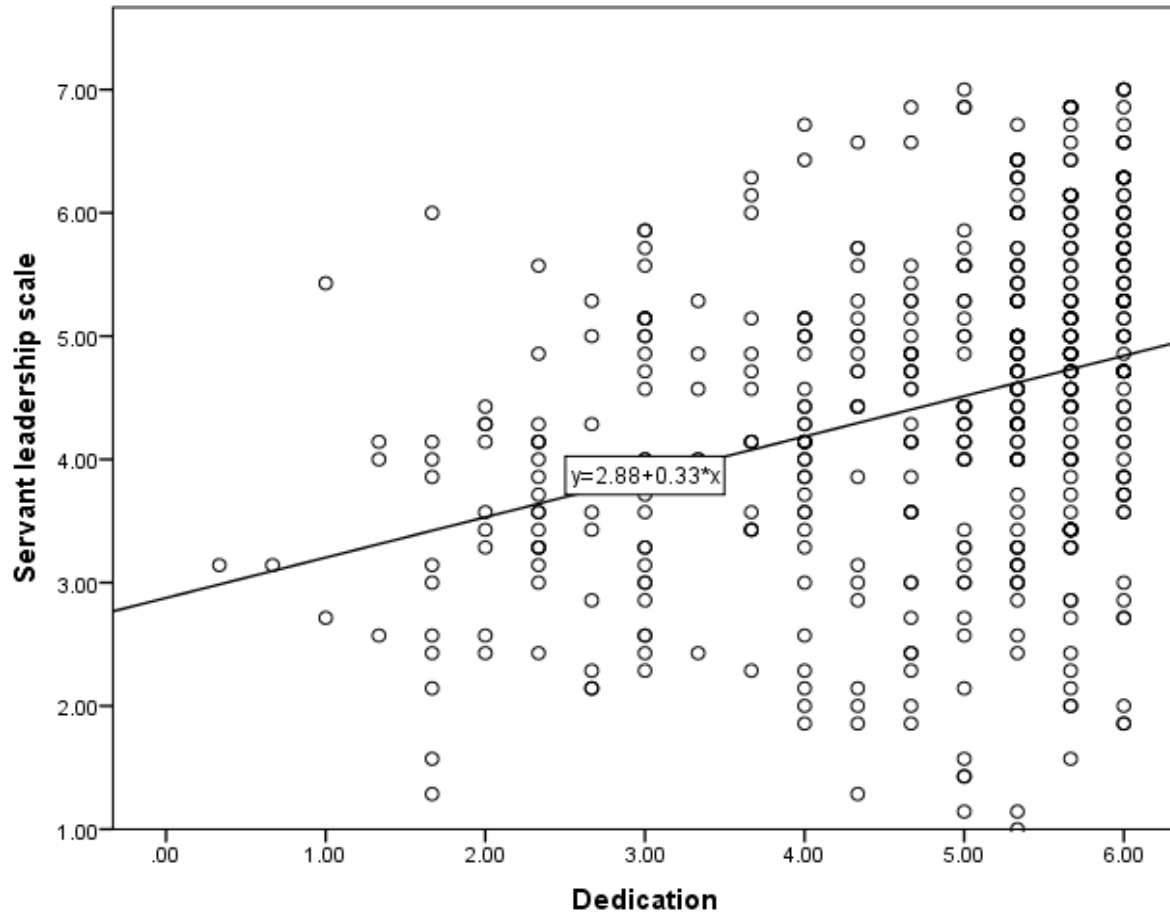
RQ4: Is there a significant relationship between the employee's perceptions of the servant leadership behavior of the supervisor and the employee's self-rating of dedication?

H0: There is no significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of dedication.

HA: There is a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of dedication.

Figure 30

Correlation between Servant Leadership (SL) Scale and Dedication (Utrecht Work Engagement Subdomain)



Note. Pearson correlation = 0.325, $p < 0.001^*$ Spearman correlation = 0.349, $p < 0.001^*$

The figure 30 shows that the data points seem to make a straight line going from near the origin out to high y-values. This means that servant leadership and dedication (which is a subset of engagement) can be said to have a positive correlation. Using linear regression analysis, the correlation of servant leadership with dedication was found to be 0.349, $p < 0.001^*$. The linear relationship between the two is described by the equation $y = 2.88 + 0.33x$. This was a medium positive correlation. Therefore, we rejected the null hypothesis and failed to reject the alternative hypothesis.

RQ5: Spearman Correlations Validated using Pearson Correlations

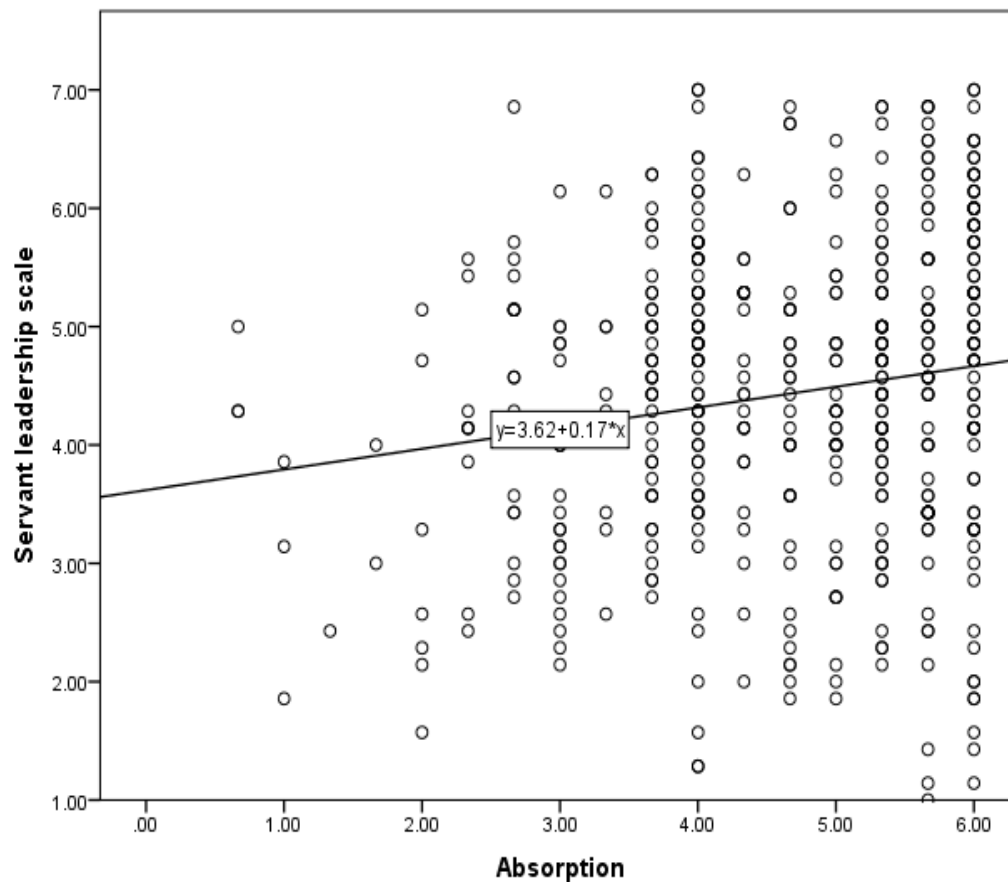
RQ5: Is there a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of absorption?

H0: There is no significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of absorption.

HA: There is a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of absorption.

Figure 31

Correlation between Servant Leadership (SL) Scale and Absorption (Utrecht Work Engagement Subdomain)



Note. Pearson correlation = 0.162, $p < 0.001^*$ Spearman correlation = 0.164, $p < 0.001^*$

Figure 31 seems to show the line of best fit to be slanting left. The data points seem to make a straight line going from near the origin out to high y-values. This means that servant leadership and absorption (which is a subset of engagement) can be said to have a positive correlation. However, this seems to be a very slight positive correlation. Using linear regression analysis, the correlation of servant leadership with absorption was found to be 0.164, $p < 0.001^*$. The linear relationship between the two is described by the equation $y = 3.62 + 0.17x$. This was a weak positive relationship. Therefore, we rejected the null hypothesis and failed to reject the alternative hypothesis.

RQ 6: MANOVA validated using ANOVA.

RQ6: Would institutions that explicitly promote the servant leadership behavior of the supervisor score significantly higher on vigor, dedication, and absorption, and score significantly lower on exhaustion and disengagement, compared to institutions that do not explicitly endorse the servant leadership behavior of the supervisor?

HO: Institutions that explicitly promote the servant leadership behavior of the supervisor do not score significantly higher on vigor, dedication, and absorption, or significantly lower on exhaustion and disengagement, compared to institutions that do not explicitly endorse the servant leadership behavior of the supervisor.

HA: Institutions that explicitly promote the servant leadership behavior of the supervisor score significantly higher on vigor, dedication, and absorption, or significantly lower on exhaustion and disengagement, compared to institutions that do not explicitly endorse the servant leadership behavior of the supervisor.

To answer this sixth research question, we used MANOVA, which allows for the comparison of dependent-variable means across multiple groups. In this study, it is used to compare the means

of burnout (exhaustion and disengagement) and engagement (vigor, dedication, and absorption) as dependent variables to servant leadership which is the independent variable.

MANOVA is based on certain assumptions. It requires that the observations be independent, the dependent variables are multivariate normally distributed, and the covariance matrix of the dependent variables is homogeneous across groups.

In Table 13 below, based on the MANOVA analysis, we can see that $p < 0.05$. This is significant. Hence, we reject the null hypothesis of normal population distributions for vigor, dedication, absorption, disengagement, and exhaustion.

Table 13

Test of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Vigor	0.158	498	0.000	0.890	498	0.000
Dedication	0.212	498	0.000	0.851	498	0.000
Absorption	0.165	498	0.000	0.912	498	0.000
Disengagement	0.086	498	0.000	0.986	498	0.000
Exhaustion	0.086	498	0.000	0.988	498	0.001

^a Lilliefors Significance Correction

In Table 13, this study will report on Pillai's trace values instead of Wilks' lambda values. Pillai's trace values prove robust with reference to this violation. According to Ching-Hong (2021), when the assumptions of normality and homogeneous covariance matrices are not met, past research has shown that the type I error rate of the standard MANOVA test statistics may be inflated, while their power may be reduced. The test of normality is explained below.

Secondly this study performed Box's Test of Equality of Covariance Matrices. Box's test detects even small departures from homogeneity. This statistic tests the null hypothesis that the variance-covariance matrices are the same across all three groups of servant leadership, burnout, and engagement.

Table 14

Box's Test of Equality of Covariance

Box's M	1.797
F	Approx. .596
df1	3
df2	44646846.224
Sig.	.617

In Table 14, It was required for this study that Box's test of covariance be insignificant. In the case of the study data, $p = .617$, which was insignificant. Thus, the assumption of homogeneity is met. However, we will still report on Pillai's trace since the assumption of normality was broken. The output of Box's test of the null hypothesis of the equality of population covariance matrices is shown below. Further, this study also did the Levene's test. This test resembles Box's test, though it is more appropriate for non-normal distribution.

Table 15 below summarizes Levene's test of the equality of the variances of engagement: vigor, dedication, and absorption, and burnout: exhaustion and disengagement. These tests are the same for one-way ANOVA on each of the dependent variables, which leads to validation of the results for MANOVA.

Table 15*Levene's Test of Homogeneity of Variances for Burnout*

		Levene's Statistic	df1	df2	Sig.
Exhaustion	Based on Mean	3.831	1	496	.051
	Based on Median	4.212	1	496	.041
	Based on Median and with adjusted df	4.212	1	495.214	.041
	Based on trimmed mean	3.867	1	496	.050
Disengagement	Based on Mean	2.145	1	496	.144
	Based on Median	2.174	1	496	.141
	Based on Median and with adjusted df	2.174	1	495.167	.141
	Based on trimmed mean	2.157	1	496	.143

Table 15, Levene's test should not be significant for any of the dependent variables, since we met the assumption of the homogeneity of variance when we did Box's test. Looking at the table above we can see that the assumption of the homogeneity of variance was met. The values for exhaustion at $p = .051$ and for disengagement at $p = .144$. These values are not significant. As Levene's test fulfilled the criteria of insignificant p-value, the assumption of homogeneity of variance was also tested for engagement as a dependent variable.

In table 16 below, that assumption was broken because $p < .05$ both for vigor, dedication, and absorption. This led to a lessening of confidence in the reliability of the univariate tests to follow (the ANOVA results).

Table 16

Levene's Test of Homogeneity of Variances for Engagement

		Levene's Statistic	df1	df2	Sig
Vigor	Based on Mean	23.667	1	496	.000
	Based on Median	18.993	1	496	.000
	Based on Median and with adjusted df	18.993	1	454.148	.000
	Based on trimmed mean	22.826	1	496	.000
Dedication	Based on Mean	55.157	1	496	.000
	Based on Median	45.207	1	496	.000
	Based on Median and with adjusted df	45.207	1	475.281	.000
	Based on trimmed mean	56.221	1	496	.000
Absorption	Based on Mean	5.013	1	496	.026
	Based on Median	4.047	1	496	.045
	Based on Median and with adjusted df	4.047	1	473.295	.045
	Based on trimmed mean	4.645	1	496	.032

Table 16, Levene's test should be non-significant for all dependent variables for the assumption of homogeneity of variance to be met. However, in the table above all the values for the dependent variables are significant. This study analyzed the descriptive statistics in the MANOVA.

Table 17 is the analysis of all the three variables that were assessed based on a sample size of 498. They can be said to have near normal distribution. However, it is not a completely normal distribution.

Table 17*The Spread of Work Engagement and Servant Leadership*

Descriptive Statistics					
	Servant Leadership new	Q6	Mean	Std. Deviation	N
Vigor	1.00	LUTH	4.2322	1.64256	89
		UNTH	3.9775	1.34164	89
		UPTH	4.4879	1.43666	69
		Total	4.2119	1.49029	247
	2.00	LUTH	4.7631	1.14944	83
		UNTH	4.7430	1.08616	83
		UPTH	5.0235	1.07864	85
		Total	4.8446	1.10804	251
	Total	LUTH	4.4884	1.44664	172
		UNTH	4.3469	1.28031	172
		UPTH	4.7835	1.27573	154
		Total	4.5308	1.34803	498
Dedication	1.00	LUTH	4.3146	1.41543	89
		UNTH	4.0375	1.51210	89
		UPTH	4.6957	1.15998	69
		Total	4.3212	1.40535	247
	2.00	LUTH	5.1285	1.03572	83
		UNTH	5.0321	1.05745	83
		UPTH	5.2863	.75620	85
		Total	5.1501	.96012	251
	Total	LUTH	4.7074	1.30835	172
		UNTH	4.5174	1.40048	172
		UPTH	5.0216	.99940	154
		Total	4.7390	1.27018	498
Absorption	1.00	LUTH	4.6067	1.22326	89
		UNTH	4.3820	1.32054	89
		UPTH	4.3720	1.23476	69
		Total	4.4602	1.26202	247
	2.00	LUTH	5.0402	1.02859	83
		UNTH	4.5622	1.18359	83
		UPTH	4.8118	.96149	85
		Total	4.8048	1.07474	251
	Total	LUTH	4.8159	1.15090	172
		UNTH	4.4690	1.25592	172
		UPTH	4.6147	1.11054	154
		Total	4.6339	1.18284	498

Table 17 above contains the group means and standard deviations for each of the dependent variables: vigor, dedication, and absorption, split by the dependent variable servant leadership.

Vigor with a mean of 4.531 and standard deviation of 1.348 does not seem to have a widespread;

the same thing can be said of dedication with a mean of 4.739 and standard deviation of 1.270; absorption seems to have a similar spread with a mean of 4.633 and a standard deviation of 1.1828.

The MANOVA table below shows the results of multivariate tests on engagement and servant leadership. The MANOVA was calculated using Pillai's trace test. Using an alpha level of 0.05, this test was found to be significant: Pillai's = 0.051, $F = 4.246$, $p < 0.001$, Multivariate Partial Eta Squared = 0.025. This significant F indicates that there are significant differences among servant leadership, as well as mean values in LUTH, UNTH and UPTH on a linear combination of the dependent variables.

Table 18*Multivariate Tests between Engagement and Servant Leadership*

The MANOVA Table Using Pillai's Trace Test

Engagement	Servant Leadership	Q6	N	Mean	S.D.	Pillai's trace	Wilks' lambda	F/ P value	S95% Confidence Interval		Partial Eta Squared
									Lower Bound	Upper Bound	
ENGAGEMENT						0.051	0.950	4.246/0.000			0.025
Vigor	Poor	LUTH	89	4.23	1.64						
		UNTH	89	3.98	1.34						
		UPTH	69	4.49	1.44						
		Total	247	4.21	1.49						
	Good	LUTH	83	4.76	1.15						
		UNTH	83	4.74	1.09						
		UPTH	85	5.02	1.08						
		Total	251	4.84	1.11						
	Overall	LUTH	172	4.49	1.45			3.780/0.023	4.302	4.693	0.015
		UNTH	172	4.35	1.28				4.164	4.556	
		UPTH	154	4.78	1.28				4.548	4.964	
		Total	498	4.53	1.35						
Dedication	Poor	LUTH	89	4.31	1.42						
		UNTH	89	4.04	1.51						
		UPTH	69	4.69	1.16						
		Total	247	4.32	1.41						
	Good	LUTH	83	5.13	1.04						
		UNTH	83	5.03	1.06						
		UPTH	85	5.29	0.76						
		Total	251	5.15	0.96						
	Overall	LUTH	172	4.71	1.31			5.963/0.003	4.543	4.900	0.024
		UNTH	172	4.52	1.40				4.356	4.713	
		UPTH	154	5.02	0.99				4.802	5.180	
		Total	498	4.74	1.27						
Absorption	Poor	LUTH	89	4.61	1.22						
		UNTH	89	4.38	1.32						
		UPTH	69	4.37	1.23						
		Total	247	4.46	1.26						
	Good	LUTH	83	5.04	1.03						
		UNTH	83	4.56	1.18						
		UPTH	85	4.81	0.96						
		Total	251	4.80	1.07						
	Overall	LUTH	172	4.81	1.15			4.025/0.018	4.649	4.998	0.016
		UNTH	172	4.47	1.26				4.297	4.647	
		UPTH	154	4.61	1.11				4.406	4.777	
		Total	498	4.63	1.18						

In Table 18 above, UNTH that explicitly espoused servant leadership values had significantly lower mean engagement [vigor (4.34±1.28), dedication (4.52±1.40), and absorption (4.47±1.26)] scores. The Multivariate Partial Eta Squared = 0.025, which indicates that approximately 2.5% of

multivariate variance of the dependent variables is associated with the group factor. UNTH that explicitly espoused Servant Leadership values had significantly higher mean burnout [disengagement (2.23 ± 0.34); exhaustion (2.54 ± 0.39)] scores; even though the subdomain exhaustion score was not significant. The Multivariate Partial Eta Squared = 0.017, which indicates that approximately 1.7% of the multivariate variance of the dependent variables is associated with the group factor.

Table 19 below the description below is the spread between burnout and servant leadership shows data that seem to be clustered around the mean.

Table 19

The Spread of Burnout and Servant Leadership

	Servant Leadership new	Place of work	Mean	Std. Deviation	N
Disengagement	Poor	LUTH	2.2963	.33888	89
		UNTH	2.2921	.35252	89
		UPTH	2.1920	.30057	69
		Total	2.2657	.33559	247
	Good	LUTH	2.1265	.38080	83
		UNTH	2.1627	.31883	83
		UPTH	2.1985	.35001	85
		Total	2.1628	.35062	251
	Total	LUTH	2.2144	.36862	172
		UNTH	2.2297	.34192	172
		UPTH	2.1956	.32775	154
		Total	2.2139	.34675	498
Exhaustion	Poor	LUTH	2.5590	.42057	89
		UNTH	2.6053	.35948	89
		UPTH	2.4366	.34873	69
		Total	2.5415	.38443	247
	Good	LUTH	2.3283	.40231	83
		UNTH	2.4623	.40185	83
		UPTH	2.2809	.42648	85
		Total	2.3566	.41605	251
	Total	LUTH	2.4477	.42662	172
		UNTH	2.5363	.38610	172
		UPTH	2.3506	.39993	154
		Total	2.4483	.41084	498

Table 19 shows Disengagement has a mean of 2.2139 with a standard deviation of 0.34675, while exhaustion has a mean of 2.4483 and a standard deviation of 0.41084 in a sample

of 498. The difference between the mean and standard deviation indicates that the data may have a near normal distribution.

Table 20 below shows the results of multivariate tests between burnout and servant leadership. The following is the result of the MANOVA using Pillai's trace test and an alpha level of 0.05: this test is significant, Pillai's = 0.034, $F = 4.245$, $p = 0.002$, Multivariate Partial Eta Squared = 0.017.

Table 20

The Results of Multivariate Tests between Burnout and Servant Leadership

Burnout	Servant Leadership	Q6	N	Mean	S. D.	Pillai's trace	Wilks' lambda	F/p value	95% Confidence Interval	Partial Eta Squared	
									Lower Bound	Upper Bound	
BURNOUT			498	5.23	0.49	0.034	0.966	4.273/ 0.002			0.017
Disengagement	Poor	LUTH	89	2.29	0.34						
		UNTH	89	2.29	0.35						
		UPTH	69	2.19	0.30						
		Total	247	2.27	0.34						
	Good	LUTH	83	2.13	0.38						
		UNTH	83	2.16	0.32						
		UPTH	85	2.19	0.35						
		Total	251	2.16	0.35						
	Overall	LUTH	172	2.21	0.37			0.355/ 0.701	2.160	2.263	
		UNTH	172	2.23	0.34				2.176	2.279	
		UPTH	154	2.19	0.33				2.141	2.250	
		Total	498	2.21	0.35						
Exhaustion	Poor	LUTH	89	2.56	0.42						
		UNTH	89	2.60	0.36						
		UPTH	69	2.44	0.35						
		Total	247	2.54	0.38						
	Good	LUTH	83	2.33	0.40						
		UNTH	83	2.46	0.40						
		UPTH	85	2.28	0.43						
		Total	251	2.36	0.42						
	Overall	LUTH	172	2.45	0.43			7.932/ 0.000	2.384	2.503	
		UNTH	172	2.54	0.39				2.475	2.593	
		UPTH	154	2.35	0.39				2.296	2.422	
		Total	498	2.45	0.41						

In Table 20 above, the significant F indicates that there are significant differences among the servant leadership variable as also mean values in LUTH, UNTH and UPTH on a linear combination of the dependent variables. UNTH that explicitly espoused Servant Leadership values had significantly higher mean burnout [disengagement (2.23 ± 0.34); exhaustion (2.54 ± 0.39)] scores; even though the subdomain exhaustion score was not significant. The Multivariate Partial Eta Squared = 0.017, which indicates that approximately 1.7% of the multivariate variance of the dependent variables is associated with the group factor. Tables 21 to 30 show the results of univariate (ANOVA) tests between burnout and servant leadership.

Table 21 (ANOVA)

The Spread of Exhaustion and Servant Leadership

Descriptive

Servant Leadership new	Place of Work	Mean: Exhaustion	N	Std. Deviation
Poor	LUTH	2.5590	89	.42057
	UNTH	2.6053	89	.35948
	UPTH	2.4366	69	.34873
	Total	2.5415	247	.38443
Good	LUTH	2.3283	83	.40231
	UNTH	2.4623	83	.40185
	UPTH	2.2809	85	.42648
	Total	2.3566	251	.41605
Total	LUTH	2.4477	172	.42662
	UNTH	2.5363	172	.38610
	UPTH	2.3506	154	.39993
	Total	2.4483	498	.41084

In Table 21, UNTH that explicitly espoused servant leadership values had significantly higher mean burnout; exhaustion (2.54 ± 0.39).

Table 22 (ANOVA)*The Analysis of Variance of Exhaustion*

		Sum of Squares	df	Mean Square	F	Sig.
Exhaustion * Servant Leadership New	Between Groups (Combined)	4.257	1	4.257	26.518	0 .000
	Within Groups	79.630	496	.161		
	Total	83.887	497			

Table 22 is the ANOVA (F) values for exhaustion is (26.518; 0.000) with (0.000) significance , which is statistically significant.

Table 23 (ANOVA)*The Spread of Disengagement and Servant Leadership*

Servant Leadership New	Place of Work	Mean: Disengagement		
Poor	LUTH	2.2963	89	.33888
	UNTH	2.2921	89	.35252
	UPTH	2.1920	69	.30057
	Total	2.2657	247	.33559
Good	LUTH	2.1265	83	.38080
	UNTH	2.1627	83	.31883
	UPTH	2.1985	85	.35001
	Total	2.1628	251	.35062
Total	LUTH	2.2144	172	.36862
	UNTH	2.2297	172	.34192
	UPTH	2.1956	154	.32775
	Total	2.2139	498	.34675

In Table 23, UNTH that explicitly espoused servant leadership values had significantly higher mean burnout: disengagement (2.23 ± 0.34) scores

Table 24 (ANOVA)*Analysis of Variance of Disengagement and Servant Leadership*

			Sum of Squares	df	Mean Square	F	Sig.
Disengagement * Servant Leadership New	Between Groups	(Combined)	1.317	1	1.317	11.175	0.001
	Within Groups		58.439	496	.118		
	Total		59.756	497			

Tables 24 show the results of univariate tests (ANOVA) between engagement and servant leadership. the ANOVA (F) values for disengagement (11.175) and (0.001) significance. This is statistically significant.

Table 25 (ANOVA)*The Spread of Vigor and Servant Leadership*

Servant leadership new	Place of Work	Mean: Vigor	N	Std. Deviation
Poor	LUTH	4.2322	89	1.64256
	UNTH	3.9775	89	1.34164
	UPTH	4.4879	69	1.43666
	Total	4.2119	247	1.49029
Good	LUTH	4.7631	83	1.14944
	UNTH	4.7430	83	1.08616
	UPTH	5.0235	85	1.07864
	Total	4.8446	251	1.10804
Total	LUTH	4.4884	172	1.44664
	UNTH	4.3469	172	1.28031
	UPTH	4.7835	154	1.27573
	Total	4.5308	498	1.34803

In Table 25, UNTH that explicitly espoused servant leadership values had significantly lower engagement: vigor (4.34 ± 1.28) score.

Table 26 (ANOVA)*The Analysis of Variance Vigor and Servant Leadership*

		Sum of Squares	df	Mean Square	F	Sig.
Vigor * Servant Leadership New	Between Groups (Combined)	49.842	1	49.842	28.972	0.000
	Within Groups	853.297	496	1.720		
	Total	903.139	497			

In Table 26 UNTH that explicitly espoused servant leadership values had significantly lower engagement; vigor variance. The ANOVA (F) values for vigor (28.9 at 0.000 significance. This is statistically significant.

Table 27 (ANOVA)*The Spread of Servant Leadership and Dedication*

Servant Leadership new	Place of Work	Mean: Dedication	N	Std. Deviation
Poor	LUTH	4.3146	89	1.41543
	UNTH	4.0375	89	1.51210
	UPTH	4.6957	69	1.15998
	Total	4.3212	247	1.40535
Good	LUTH	5.1285	83	1.03572
	UNTH	5.0321	83	1.05745
	UPTH	5.2863	85	.75620
	Total	5.1501	251	.96012
Total	LUTH	4.7074	172	1.30835
	UNTH	4.5174	172	1.40048
	UPTH	5.0216	154	.99940
	Total	4.7390	498	1.27018

In Table 27, UNTH that explicitly espoused servant leadership values, had significantly lower engagement. The dedication score is (4.52±1.40),

Table 28 (ANOVA)*The Analysis of Variance Servant Leadership and Dedication*

		Sum of Squares	df	Mean Square	F	Sig.
Dedication * Servant Leadership new	Between Groups	85.531	1	85.531	59.225	0.000
	Within Groups	716.311	496	1.444		
	Total	801.842	497			

In Table 28, UNTH that explicitly espoused servant leadership values had significantly lower engagement. The ANOVA (F) values for dedication is (59.225; and the significance is at 0.000). This is statistically significant.

Table 29 (ANOVA)*The Spread of Absorption and Servant Leadership*

Servant Leadership new	Place of Work	Mean: Absorption	N	Std. Deviation
Poor	LUTH	4.6067	89	1.22326
	UNTH	4.3820	89	1.32054
	UPTH	4.3720	69	1.23476
	Total	4.4602	247	1.26202
Good	LUTH	5.0402	83	1.02859
	UNTH	4.5622	83	1.18359
	UPTH	4.8118	85	.96149
	Total	4.8048	251	1.07474
Total	LUTH	4.8159	172	1.15090
	UNTH	4.4690	172	1.25592
	UPTH	4.6147	154	1.11054
	Total	4.6339	498	1.18284

In table 29, UNTH that explicitly espoused servant leadership values had significantly lower engagement; absorption mean and are (4.47±1.26)]

Table 30 (ANOVA)*The Analysis of Variance Absorption and Servant Leadership*

		Sum of Squares	df	Mean Square	F	Sig.
Absorption * Servant Leadership New	Between Groups (Combined)	14.783	1	14.783	10.774	0.001
	Within Groups	680.571	496	1.372		
	Total	695.353	497			

In table 30, UNTH that explicitly espoused servant leadership values had significantly lower engagement. The ANOVA (F) for absorption and significance level (10.774; 0.001), this is statistically significant.

Based on the results of the multivariate analysis for research question six, using an alpha level of 0.05, this test is significant: Pillai's = 0.034, $F = 4.245$, $p = 0.002$, Multivariate Partial Eta Squared = 0.017. This significant F indicates significant differences among the servant leadership values as also mean values in LUTH, UNTH, and UPTH. Thus, the null hypothesis was accepted, and the alternate hypothesis was rejected.

Summary of Findings

Based on Figures 24, 25, 26, 27, and 28, as well as Tables 18 and 21, we can summarize the relationship between Servant Leadership and Burnout: (exhaustion and disengagement,) and Engagement: (vigor, dedication, and absorption), among the study participants. In Figure 24, the relationship between servant leadership and exhaustion has a correlation of -0.248 ($p < 0.001$). This means that servant leadership has a significant but negative relationship with exhaustion, among the study participants. The same can be said of Figure 25, which showed the correlation between servant leadership and disengagement to be -0.169 ($p < 0.001$). Figure 21 showed that

10% of the study participants had a high level of burnout, while Figure 23 showed that 88% of the study participants showed high levels of engagement. This is surprising, taking into consideration the that many studies have said that there was an increase of burnout among nurses during the pandemic. The 88% engagement among the study participants is high and surprising.

Servant leadership showed a positive correlation among the study participants. The relationship between servant leadership and vigor showed a correlation of 0.279 ($p < 0.001$); for dedication, the correlation was 0.325 ($p < 0.001$); and for absorption it was 0.164, $p < 0.001$. These mean that servant leadership has a minor positive significant relationship with components of engagement.

Unfortunately, more Servant Leadership behavior of the nurse supervisors among the study participants did not result in less Burnout: (exhaustion and disengagement), neither did it result in more Engagement: (vigor, dedication, and absorption). In case of the relationship between servant leadership and other variables, as seen in Table 21, based on the MANOVA using Pillai's trace test and an alpha level of 0.05, this test is significant: Pillai's = 0.034, $F = 4.245$, $p = 0.002$, Multivariate Partial Eta Squared = 0.017. This significant F indicates that there are significant differences among the servant leadership values as also mean values in LUTH, UNTH and UPTH, on a linear combination of the dependent variables. Therefore, more servant leadership did not result in less exhaustion or disengagement. Table 18 shows the results of a MANOVA using Pillai's trace test, at an alpha level of 0.05; this test is significant: Pillai's = 0.051, $F = 4.246$, $p < 0.001$, Multivariate Partial Eta Squared = 0.025. This significant F indicates that there are significant differences among the servant leadership values as also mean values in LUTH, UNTH and UPTH, on a linear combination of the dependent variables. UNTH

that explicitly espoused servant leadership values had significantly lower mean engagement [vigor (4.34 ± 1.28), dedication (4.52 ± 1.40), and absorption (4.47 ± 1.26)] scores.

The results can be interpreted to mean that UNTH, which explicitly promoted the servant leadership behavior of the supervisors, scored significantly higher on exhaustion and disengagement, and scored significantly lower on vigor, dedication, and absorption, compared to institutions that did not explicitly promote the servant leadership behavior of the supervisors.

Review of Hypotheses (Accept or Reject)

Based on the previous summary of findings, which were obtained by using linear regression analysis and considering the p-value ($p < 0.001$), for research questions one to five, the null hypothesis was rejected, and the alternative hypothesis was accepted. However, in case of research question six, the null hypothesis was accepted, and the alternative hypothesis was rejected.

- ✓ H1: There is a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of exhaustion.
- ✓ H2: There is a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of disengagement.
- ✓ H3: There is a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of vigor.
- ✓ H4: There is a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of dedication.
- ✓ H5: There is a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of absorption.

X H6: Institutions that explicitly promote the servant leadership behavior of the supervisors do not score significantly lower on exhaustion and disengagement, and do not score significantly higher on vigor, dedication, and absorption, compared to institutions that do not explicitly promote the servant leadership behavior of the supervisor.

Chapter 5

Discussion

This study explored if there was a relationship between the servant leadership behavior of a supervisor and employee self-assessment of burnout and engagement, among a sample of nurses in Nigeria. The study found a negative and significant relationship between servant leadership behavior of the supervisors and the employees' burnout. It also found a positive but significant relationship between the servant leadership behavior of the supervisor and the employees' engagement. Surprisingly, it found that institutions, which explicitly espoused the servant leadership behavior of the supervisor, did not yield to lesser burnout or more engagement.

The discussion on this study will focus on three findings from the study. The first section of this chapter contains a discussion on servant leadership and burnout (made up of exhaustion and disengagement). This aspect of the discussion will utilize the results from the study's first two research questions (RQ1 and RQ2). These research questions dealt with the two burnout components: exhaustion and work disengagement. The second section of this chapter deals with a surprising aspect of the results, that is, the result of the sixth research question (RQ6): more servant leadership behavior of the supervisor did not result in lesser burnout and more engagement. The third section of the chapter focuses on the work engagement component of the research, which is covered by research questions three to five (RQ3, RQ4, and RQ5).

The conceptual framework of the study was based on the job resources model by Demerouti et al. (2001). In this model, both high job demands, and poor job resources contribute to burnout, whereas only adequate job resources contribute to work engagement. The example of job demands include physical overload, time pressure, physical environment, shift work, etc.,

whereas the examples of job resources include feedback, rewards, job contentment, job security, and supervisor support. However, this study examined only one job resource: supervisor support (servant leadership).

We begin this discussion with a consideration of RQ1: Is there a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of exhaustion? This study found the relationship to be significant (Pearson correlation = -0.248 , $p < 0.001^*$ Spearman correlation = -0.241 , $p < 0.001^*$). Thus, there exists a minor, significant, and negative correlation between the SL scale and exhaustion among the study participants. Therefore, we rejected the null hypothesis and failed to reject the alternative hypothesis. The relationship is minor, negative, and significant; however, this study expected a medium or high negative relationship. In hindsight, the result is very reasonable when we consider some factors and the period of the study. Some factors may have contributed to the minor yet significant relationship. The study took place during the COVID-19 pandemic, and this may have influenced the findings. The three participating hospitals were teaching hospitals with trauma centers, and they had quarantine units for COVID-19 patients. As a result, at the time of the study, nurses and supervisors may have experienced extraordinary demands, resulting in excessive stress and an atypical work context. According to Lisa-Gutierrez (2020), a nurse once felt that, as the pandemic raged, her world was crumbling around her ankles. This is the nature of the time in which the study was undertaken — not just here in the United States, conditions were similar worldwide (Chan, 2021).

The findings for RQ2 may have been influenced similarly. RQ2 was: "Is there a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of work disengagement?" This study found a

minor, negative, and significant relationship (Pearson correlation = -0.160 , $p < 0.001^*$ Spearman correlation = -0.178 , $p < 0.001^*$). Therefore, the null hypothesis was rejected, and we failed to reject the alternative hypothesis. The circumstances that may have affected the first research question may have also affected the second research question. In this situation, lack of resources was a determining factor too. For example, the lack of job resources may also have contributed to the minor, negative, significant relationship. When the study was conducted, there was little or no personal protective equipment (PPE) in these hospitals. The lack of resources was so dire that the National Association of Nigeria Nurses and Midwives (NANNM), Edo chapter (a state in Nigeria), highly prioritizing the safety, health, and well-being of its members and the public, called on the state government to ensure adequate training and the provision of personal protective equipment (PPE) for use by health workers. They noted that when PPE is not available, it becomes impossible to hold anyone liable for not rendering service. They, therefore, urged nurses not to risk their lives, but to withdraw their services in such circumstances. (“Dissecting ongoing exodus of Nigerian health-care workers,” 2022). Further, the Joint Health Service Unions, which is a trade union representing medical staff such as nurses, midwives, and radiologists, were threatening to strike. This was because of a lack of resources (e.g., non-payment of a hazard allowance for treating coronavirus patients). They also demanded life insurance for their members, full access to protective equipment, and pay structure adjustments. These exceptional circumstances could have influenced how participants responded to the survey instruments.

This study also explored and analyzed possible relationships and found differences regarding age cohorts. The results of the bivariate association between the mean OLBI scores and socio-demographic characteristics of participants, revealed that the younger study

participants aged 20-29 years had significantly higher mean disengagement (2.36 ± 0.4) and exhaustion scores (2.43 ± 0.3). When the distribution of disengagement and exhaustion scores among the study participants were examined, the following categories and distribution emerged: low exhaustion (3.6%), moderate exhaustion (69.3%), high exhaustion (3.7%), low disengagement (2.9), moderate disengagement (90.0%), and high disengagement (7.1%). Summarily, 1.6% of the participants reported low burnout, 88.4% reported moderate burnout, and 10% reported high burnout.

Thus, the further exploration of the rate of burnout among the study participants yielded an interesting result. As seen above about 10% of the study participants were seriously burned out, which is suggestive of the global average for seriously for highly burnout nurses. The global burnout average was reported following a meta-analysis of 113 published studies. The meta-analysis was carried out on data obtained from 45,539 nurses across 49 countries. Based on the studies/data included, the pooled-prevalence rate stood at 11.23% for high burnout symptoms (95% CI:8.83-13.63%), suggesting that about one-tenth of nurses worldwide suffered high burnout symptoms (Woo et al., 2020). Hence, the burnout rate among the nurses who participated in the study is statistically like the global average.

Some other studies (that are not metanalyses), also support the findings of this study. While this study did not focus on the servant leadership behavior of the Chief Executive Officers (CEOs) of companies, earlier studies have examined CEOs' servant leadership behavior. For instance, in a study by Chi and Chi (2013), the five factors of servant leadership: interpersonal support ($p = 0.000$), building community ($p = 0.000$), altruism ($p = 0.000$), egalitarianism ($p = 0.000$), and moral integrity ($p = 0.000$), significantly and positively correlated with the dependent variable of job burnout in three subsets: emotional exhaustion, depersonalization, and personal

accomplishment. This suggests that employee job burnout on all three dimensions was related to their perceptions of their CEO's servant leadership across five areas. The result of the study referenced above is consistent with the findings in this present study: there is a minor, negative, significant correlation between servant leadership behavior and burnout.

However, some other studies do not support the findings of this study. For example, a study by Milacci (2021) examined the relationship between servant leadership behavior and burnout among retail managers between the ages of 18 and 65, using the SL Scale and the Copenhagen Burnout Inventory (CBI). The study sought to understand if a relationship exists between servant leadership and the three dimensions of burnout (personal, work-related, and client-related). Milacci's results found no statistically significant relationship between servant leadership behavior and burnout among the sample: $r(130) = .118, p = .183$, and no significant relationship between servant leadership behavior and any of the three dimensions of the CBI: personal burnout $r(130) = .148, p = .092$, work-related burnout $r(130) = .106, p = .228$, client-related burnout $r(130) = .055, p = .534$. Milacci attributed the results of the study to the COVID-19 crisis and the associated panic buying. At the peak of the COVID-19 pandemic, there were government restrictions and consumer skepticism. Also, a massive shift in buying habits occurred when most commerce was conducted online. Several retail managers have had to work unprecedented hours because of huge online demand and with a never-before-seen lack of resources. This, according to Milacci (2021), could have caused uncharacteristic levels of burnout among study participants, thereby blunting the effects of servant leadership behavior.

We next compare the key findings of this study with previous studies in the field. A study by Dimitra et al. (2021) examined "The impact of Servant Leadership and Perceived Organizational and Supervisor Support on Job Burnout and Work-Life Balance in the Era of

Teleworking and COVID-19.” The study noted that the confidence intervals for the indirect effects of servant leadership on job burnout [bootstrapping estimate 50.21; 95% CI (0.54, 0.15)] are negative and non-significant. The direct effect estimates of servant leadership on job burnout (effect 50.10; $p = 50.66$) are positive and non-significant too. Dimitra et al. (2021) used perceived organizational theory and perceived supervisor support as their conceptual frame, while our present study used job and resource theory to examine job burnout; their sample consisted of teleworkers and non-teleworkers in Greece, while the present study sampled nurses in Nigeria. Both studies used the framework developed by Liden et al. (2008) to measure servant leadership and its relationship to burnout. However, they arrived at different results. Their study yielded a non-significant result, while we arrived at a significant result. Dimitra et al.(2021) opined that the non-significant, negative relationship they found may have been influenced by servant leaders, who deliberately convey the positive message that an organization supports employees’ socio-emotional needs, which is in turn mirrored in organizational policies and practices. This type of messaging seems to emphasize the socio-emotional needs of the employee at the expense of leadership. It is interesting to note that this is one of the criticisms levelled against servant leadership behaviors. According to Wu et al. (2020), servant leadership behavior can sometimes lead to follower-serving behaviors. This is one of the weaknesses of servant leadership. Serving behaviors of the servant leader Wu et al. (2020) opined that it does not lay much emphasis on leadership aspect of the theory, rather, it emphasizes serving others.

While this study found a weak, negative, significant relationship, some prior studies found strong, negative results. One such study is by Umanets (2022), who found a strong, negative relationship between servant leadership behavior and burnout. This study examined the relationship between servant leadership and burnout among student-athletes. Umanets (2022)

observed that the statistical analysis revealed a significant, negative correlation between servant leadership and burnout scores: $r = -.435, p < .001$. The multiple regression model accounted for 20.1% of the variance ($R^2 = .201, F(5,458) = 22.999, p < .001$) in the scores, based on the five servant leadership predictor variables.

We will now discuss the most surprising aspect of the results of this study. This is the examination of the relationship between servant leadership behavior and burnout from the perspective of the workplace. This will discuss the sixth research question (RQ6): “Would employees in institutions that explicitly support servant leadership behavior of the supervisor score significantly lower on exhaustion and disengagement and significantly higher on vigor, dedication, and absorption, compared to employees in institutions that do not explicitly support the servant leadership behavior of the supervisor?” Using an alpha level of 0.05, the results of this study showed Pillai’s trace = 0.034, $F = 4.245, p = 0.002$, Multivariate Partial Eta Squared = 0.017. This test is significant. The significant F indicates significant differences among the servant leadership mean values in the UNTH, LUTH, and UPTH, on a linear combination of the dependent variables. UNTH, which explicitly espoused servant leadership values, had significantly higher mean burnout [disengagement (2.23 ± 0.34); exhaustion (2.54 ± 0.39)] scores, even though the subdomain exhaustion score was not significant]. The Multivariate Partial ^{Eta} Squared = 0.017, which indicates that approximately 1.7% of the multivariate variance of the dependent variables, was associated with the group factor.

This result was surprising, although some earlier studies have arrived at similar results. A study by Shim et al. (2021) entitled, “Street-Level Bureaucrats’ Work Engagement: Can Public Managers’ Servant-Leader Orientation Make a Difference?” found that the manager’s servant-leader orientation positively correlated with work engagement. However, the structural equation

modeling results revealed that the manager's servant-leader orientation did not have a significant relationship with work engagement, as the coefficients for the models both with and without controlling of common methods variance were not statistically significant ($\gamma = 0.03$, $p = \text{n.s.}$). In other words, the results suggest that the manager's servant-leader orientation might not directly influence the enhancement of employees' work engagement when employee resources are held constant. Except for the fact that Shim et al. (2021) used a convenience sample from the field of public personnel management in Indonesia, and we used a convenience sample from a population of nurses in Nigeria, the results seem to be consistent in suggesting that servant leadership alone is not sufficient to result in less burnout or more engagement. Other resources are also necessary for the servant leadership behavior of the supervisors or managers to be effective and efficient in mitigating burnout and enhancing work engagement.

However, in retrospect, when we look at the demographics and the environment in which the UNTH is operating, the findings of this study are understandable. UNTH operates in a very unsafe environment. Insecurity and the sit-at-home orders by the Indigenous People of Biafra known as (IPOB) may have influenced the stress or burnout levels of the nurses at the UNTH. This hospital lies at the heart of the southeastern region of Nigeria. This is the region dominated by the defunct Biafra, who fought and lost the war of independence from Nigeria between 1967 to 1970. IPOB is a militant group still struggling for the independence of Biafra. On Mondays, as per their sit-at-home orders, everything is shut down in the region: courts, markets, schools, banks, post offices, government offices, private businesses, etc. Their security arm is called the Eastern Security Network (ESN), fearfully referred to by the locals as "the unknown gunmen". This group can kill, kidnap, maim or harass any person they see on the road on Mondays. It is even worse if they think that an individual is a government spy. A recent news headline from

Nigeria read, “Six people feared dead, as IPOB’s sit-at-home order records total compliance” (AllAfrica.com, 2021, August 10). Even law enforcement agents such as the police are afraid to wear their uniforms. Once, on my way to the UNTH to collect data, I saw members of the “unknown gunmen” dressed in black attire and red berets. Fortunately, they did not stop me. They train in the southeastern forests, they have a chain of command, and more importantly, they have AK-47 rifles, perhaps stolen from police stations. Between September 2020 and May 2021, there was a wave of attacks on police stations and other public facilities in southeastern Nigeria, which authorities blamed on IPOB. (The environment described above is the condition under which the nurses at UNTH are working.

In the first part of this chapter on discussion, we discussed the relationship between perceived servant leadership behavior and burnout: exhaustion and disengagement. This covered RQ1 and RQ2. In the second part of this chapter, we discussed why more servant leadership did not result in less burnout or more engagement, which covered RQ6. In this third part, we will discuss the relationship between servant leadership and work engagement: vigor, dedication, and absorption. The work engagement part of the study covers research questions three to five.

Research RQ3 asks, “Is there a significant relationship between the employee’s perceptions of the servant leadership behavior of the supervisor and the employee’s self-rating of vigor?” The study found a slight positive correlation between the SL scale and vigor (Pearson correlation = 0.279, $p < 0.001^*$ Spearman correlation = 0.246, $p < 0.001^*$). The RQ4 is: “Is there a significant relationship between the employee’s perceptions of the servant leadership behavior of the supervisor and the employee’s self-rating of dedication?” The study showed a medium positive correlation between the SL scale and dedication (Pearson correlation = 0.325, $p < 0.001^*$ Spearman correlation = 0.349, $p < 0.001^*$). Finally, research question five asks, “Is

there a significant relationship between the employee's perception of the servant leadership behavior of the supervisor and the employee's self-rating of absorption?" The study showed a very slight positive correlation between the SL scale and absorption (Pearson correlation = 0.162, $p < 0.001^*$ Spearman correlation = 0.164, $p < 0.001^*$).

We will now explain the minor positive correlation between servant leadership and employee work engagement in this study. It must be noted that despite high demands on, and scarcity of resources for nurses due to COVID-19, which should have resulted in exhaustion and disengagement, the results showed a minor significant positive relationship. This may be understood with reference to Kahn's (1990) seminal work on "The Psychological Conditions of Personal Engagement and Disengagement." According to Kahn, at work, people essentially ask themselves three fundamental questions in performing each role situation: (a) How meaningful is it for me to bring myself into this performance? (b) How safe is it to do so? (c) How available am I to do so? These are the three psychological conditions for work engagement and work disengagement. Because of its altruistic approach, servant leadership helps employees to find meaning in their work and provides safe working environments, as the employees make themselves available for work (Haar et al., 2017). It is very interesting that despite the difficult working conditions and lack of resources, this study still found a positive significant relationship between servant leadership and employee work engagement.

The correlation between servant leadership and engagement has also been studied in other areas of life, such as banking, schools, retail business etc. Some studies also found a minor significant positive relationship between servant leadership and engagement as we did. For instance, in their work, "Servant leadership and Engagement: A Dual Mediation Model," Bao et al. (2018) found the effect of servant leadership on engagement to be significant ($\beta = 0.17$, $p <$

0.05). The total indirect effect of servant leadership on engagement was found to be 0.148 [95% CI = (0.085, 0.250)]. Their findings are consistent with the findings in our study. According to Bao et al. (2018), their findings were affected by social exchange, and servant leadership promotes followers' work engagement mostly through the social exchange mechanism, instead of through the social learning process. Although they used a sample from Chinese public sector employees and a social exchange mechanism as the conceptual model, while we used the job resources model and a sample from the population of nurses in Nigeria, the fundamentals of servant leadership are still the same for both studies: care, interest, and employee development.

Whereas this study found a minor positive significant relationship between servant leadership behavior of the supervisor and work engagement, some studies have found a stronger positive relationship between the two variables. For instance, Kaya et al.'s (2020) study compared authentic leadership and servant leadership to explain work engagement and burnout. The study found servant leadership to have a more positive impact on work engagement than authentic leadership. Servant leadership effect was ($\beta_{31} = 0.45, t = 4.88$) on work engagement, while authentic leadership impact stood at ($\beta_{32} = 0.32, t = 3.58$). Further, a study by Haar et al. (2017) found strong support for the relationship between servant leadership and the three work engagement dimensions: vigor, dedication, and absorption. Haar et al. observed that the sleep quality of supervisors is positively related to supervisor servant leadership, and altruistic behavior plays a mediating role. They found that supervisor servant leadership is positively related to employee work engagement: vigor, dedication, and absorption. Ozturk et al. (2021) also found a significant positive relationship between servant leadership and work engagement, although their study hypothesized that work engagement is a mediator between servant leadership and job satisfaction. They used the same seven items from Liden et al. (2015) to

measure servant leadership. They also used the nine items from Schaufeli et al. (2006) to assess work engagement. They utilized hotel employee-supervisor dyadic data with time-lagged measurements collected in Russia. In their study, servant leadership has a more positive impact on work engagement ($\beta = 0.56, t = 5.45$) than on job satisfaction ($\beta = 0.25, t = 3.14$). These findings enhance the understanding of the effectiveness of work engagement versus job satisfaction, in the context of the effects of servant leadership on behavior. In another correlational study on servant leadership and engagement, Jin et al. (2017) drew their sample from industrial engineers. They found servant leadership and work engagement to be significantly positively correlated ($r = 0.36, p < 0.01$). Work engagement and work-related well-being were also seen to be significantly positively correlated ($r = 0.66, p < 0.01$).

Some studies use organizational learning as a conceptual research model in their study of employee work engagement and servant leadership. The results from the study by), Akharbin, et al. (2014). “The Relationship between Servant Leadership and Organizational Learning and Nurses’ Work Engagement,” showed that there was a positive and significant relationship between servant leadership, organizational learning, and work engagement ($p \leq 0.01$). Furthermore, servant leadership behavior and organizational learning predicted work engagement. This suggests that improving organizational learning and servant leadership can enhance the nurses’ work engagement. However, our study did not go into the improvement of organizational learning. Nevertheless, both studies found a small significant positive relationship between servant leadership and employee work engagement.

Some studies carried out a comparative analysis of two independent variables and servant leadership. In one such study, Wiroko (2021) conducted research to examine “The Role of Servant Leadership and Resilience in Predicting Work Engagement” in Indonesia. They used a

quantitative cross-sectional approach; this is the same method that we used. Their research data were collected using the snowball sampling method implemented in an online survey, which targeted 87 employees of various banks in Indonesia. However, our study used a paper survey administered in person. Their results showed that servant leadership ($\beta = .484$) had a bigger effect than resilience ($\beta = .047$) in predicting work engagement. It implies that the existence of a servant leader would be more beneficial than resilience to employee work engagement. They did not do a comparative analysis of another independent variable with servant leadership. However, the correlation between servant leadership and work engagement is significant in the sample from the banking sector of Indonesia, just as it is significant among nurses who participated in our study in Nigeria.

Another study that is consistent with our findings is the one by Mohammed et. al, (2020). They found a positive correlation between servant leadership and work engagement. The values of means and standard deviations are as follows: servant leadership (mean = 4.89, *SD*: 1.26) and work engagement (mean = 5.47, *SD* = 1.05). Their study found a significant strong correlation between servant leadership and work engagement. The correlation between servant leadership and work engagement was: ($r = 0.415$, $p = 0.000$). The mediating effects of the underlying mechanisms proposed in their study suggest that servant leadership does not directly lead to higher work engagement. For instance, intrinsic motivation was found to fully mediate the effect between servant leadership and academics' work engagement. These results suggest that the nurturing behavior of servant leaders ignites intrinsic motivation and autonomous behavior among followers (van Dierendonck & Patterson, 2010), which in turn positively affects work engagement among academics. In another research study, Hoch et al. (2018) collected data from hotel employees and their direct supervisors in Turkey. The data for our present study came from

nurse employees and their direct supervisors in Nigeria. Yet, the motivating aspect of servant leadership remains the same. Employees pay particular attention to how their supervisors behave. Servant leaders' focus on equal power, attention to subordinates' interests and well-being, humility, interpersonal acceptance, and provision of direction may motivate employees.

Having compared the findings in this study with prior studies, we will next revisit the conceptual model for this study to consider how the results fit the model.

Revisiting the Conceptual Model

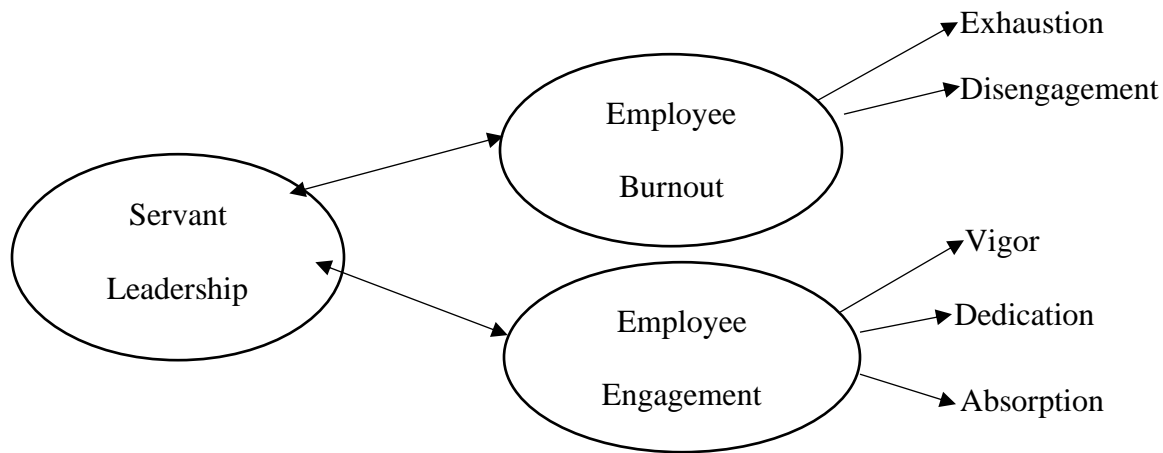
This study used the JD-R Model as its conceptual framework. There exist varied options or approaches for studying the relationship between servant leadership behavior and employees' self-perception of burnout and work engagement. For example, Zhou et al. (2020) and Wang, et. al. (2022) used the Conservation of Resources Theory as a conceptual framework to study servant leadership. That framework asserts that individuals use various resources for completing work tasks such as time, cognitive attention, and physical energy, but must replenish those resources during breaks, to avoid stress. Zeeshan, et al (2021) and other scholars have used the Self-efficacy framework to study the relationship between servant leadership behavior and employees. For instance, Cattelino, et al (2021) and Faraz (2021) used the operational definition of self-efficacy from the seminal work of Bandura (1997), who is one of the chief proponents of self-efficacy. Bandura defined self-efficacy as an individual's belief in his or her capacity to execute behavior necessary to produce specific performance attainments. Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behavior, and social environment. Some scholars have used the Social Exchange Theory to examine the relationship between servant leadership behavior and employee work engagement. These include McCune et al. (2019) and Sawan et al. (2020). According to et al. (Jahan, 2020), the Social Exchange

Theory posits the interaction of people with others, based on a self-interested assessment of the costs and benefits of such interactions. A central tenet of this theory is that better relationships enable goodwill and trust to substitute for formal contracts. Informal understandings underpinned by the value of future relationships pervade exchange between firms.

This study could have chosen any of the conceptual models above, however it chose the JD-R Model for the reasons we shall see below. The JD-R Model predicts that high or unfavorable job demands are primarily and positively related to exhaustion, whereas lack of job resources is primarily and negatively related to disengagement from work (Bakker, 2004), (Demerouti et al., 2001). These are the two components of burnout. However, in the model, only sufficient job resources result in work engagement. Furthermore, Schaufeli et al. (2013) viewed engagement as having three components: vigor, dedication, and absorption. Again, examples of job demand include physical workload, time pressure, recipient contact, physical shift work, etc. Examples of job resources include rewards, feedback, job control, participation, and supervisor support. Hence, this study examined the supervisor as the servant leader and their relationship to burnout and engagement, using the JD-R Model, which was found to best serve the purpose of the study.

Figure 32

Revisiting the Conceptual Framework



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Servant leadership support is a major job resource for negating burnout and inducing engagement (Sousa & van Dierendonck, 2014). The results of the study show that servant leadership is negatively and significantly related to burnout, and positively and significantly related to followers' work engagement. There seems to be an exchange between the altruistic nature of servant leadership and the reciprocation to the altruism by the employee, or at least an expectation of reciprocation between both parties. "Servant leaders set aside their self-interest and altruistically work for the benefit of their followers and the communities" (Newman et al., 2017, p. 49). These two perspectives imply very different and even contrasting processes, in that the first is driven by self-interest and the second by altruism (Bao et al., 2018).

In this study, engagement as a viable option was measured independently and not as the opposite of disengagement. Schaufeli et al. (2006) also argued that an employee who is not experiencing burnout is not necessarily work engaged. On the other hand, an employee who is low on work engagement may not necessarily be experiencing burnout. In addition, they also argued that the relationship between burnout and work engagement could not be empirically

studied, if measured with the same instrument. This is one of the reasons why different instruments were used to measure the different constructs in this study, as part of the JD-R Model.

One of the advantages of the JD-R Model used in this study is that it integrates a positive focus on work engagement with a negative focus on burnout into a balanced and comprehensive approach. Second, it has a broad scope that allows scholars and researchers to include all relevant job characteristics. Further, it is flexible, and so can be tailored to the needs of any organization. It also acts as a common communication tool for all stakeholders (Bakker & Demerouti, 2017). In his seminal work, Blau (1964) described this form of communication as social exchange.

Despite the burden of the COVID-19 pandemic, insufficient resources, and insecurity in the southeastern part of Nigeria, the study recruited 498 participants, applied the JD-R conceptual model, and conducted a post-hoc test. The post-hoc test resulted in a power of one, which means that the study has sufficient power to reject the null hypotheses as false. This study thus makes a theoretical contribution to the body of knowledge on servant leadership, burnout, and work engagement by providing empirical evidence of their interrelationships.

Practical Implications

The results of this study may be important for employers, industries, and institutions. It seems to reflect the recommendation of Tropello (2014). Tropello opined that today's health-care environment requires decidedly new management and leadership approaches, which can inspire all levels of employees to embrace a new era of complexity and constancy of change, while also

striving for excellence in the process. He felt that servant leadership could fill this void. Servant leadership has been described as a theory, model, philosophy, or leadership style.

From a practical standpoint, the findings of the study have several implications. First, in hospitals and other similar health-care institutional contexts, to encourage employee engagement and reduce burnout leaders should try to foster a climate that reflects servant leadership: listening, empowering, professional development, serving others, accountability, self-awareness, and emotional healing. These characteristics were the basis for development of the tool used to measure servant leadership in this study by (Liden et al., 2008).

In addition to having insufficient quantities of personal protective equipment in hospital settings, in sub-Saharan Africa and Nigeria in particular, by virtue of spending the greatest amount of time with patients while delivering care, nurses are most at risk of being diagnosed with and transmitting the virus. These nurses were simply altruistic. This lies at the core of servant leadership behavior. Panaccio et al. (2015) contended that servant leaders are altruistic.

Furthermore, in this pandemic, the noble, self-sacrificing, courageous nurses were at the forefront of patient care, combating this highly contagious and potentially fatal viral infection. There is no better example of servant leadership in action than nurses whose caring behaviors during the pandemic were crucial. According to Neville et al. (2021), an exemplary model of servant leadership was most evident during the 2020 COVID-19 pandemic. As Jimenez et al. (2021) said, nurses have risen to the occasion combating COVID-19 head-on. Around the world, they have been recognized as heroes for their work on the frontline.

However, with the relentless onslaught of COVID-19 and a widespread shortage of adequate personal protective equipment, nurses find themselves in incredibly hazardous work environments. Rudolph et al. (2021) noticed that health-care workers, especially nurses, are

susceptible to experiencing increased strain, resulting in risky behaviors and decreased well-being. In this type of working conditions, supervisor support is very necessary, and the servant leadership behavior of the nurse supervisor might better prove as leadership behavior that has a negative relationship with burnout and a positive relationship with engagement.

Based on the results of this study, employers may find servant leadership a useful leadership model. In today's increasingly complex health-care environment, nurse leaders must develop a distinct leadership style based on methodologically sound research to shape tomorrow's clinical practice (O'Brien, 2014). This research study strongly supports the servant leadership style as an appropriate form of leadership for nursing.

Limitations

One of the problems in gathering the large amount of data is the time and the patience it took. Another problem with the large number of samples that was used in the study is the statistical power of big samples. According to Faber & Fonseca, (2014), with big samples there is a greater chance of finding statistically significant relationships and differences. Although the aim was to collect more samples than the required number of samples as this will help in including the small units in the hospital that would otherwise not be reached or too small to report on. No one or any unit was excluded from the study. Increasing the sample size improved the fit between the sample and the underlying distribution. This survey is to maximize accuracy of the collected sample to the population. In doing so, the fitness for use of the data increased.

The findings of this study should be considered within the context of its limitations. Insecurity in eastern Nigeria, where UNTH is located, affects members of the public, especially nurses going to work early in the morning or returning home late in the evenings. Sometimes, I was scared to go to the hospital in the city because of insecurity. Yet, I needed to go because it

was necessary to collect the data. I once drove past “unknown gunmen” dressed in black attire and red berets. They were trained in the southeastern Nigerian forests, and more importantly, they had AK-47 rifles, which they may have stolen from police stations. Between September 2020 and May 2021, there was a wave of attacks on police stations and other public facilities in southeastern Nigeria, which authorities blamed on the ESN and IPOB. I expect that my feelings of terror would also be experienced by the nurses at UNTH Enugu, and this may have affected the study results.

Second, the study was conducted during the peak of the COVID-19 pandemic. The pandemic protocols may have invariably affected the study (for example, the time and process of the distribution and collection of the questionnaires were adjusted to fit the COVID-19 pandemic protocols in these hospitals).

Third, though the current study attempted to reduce the bias of the common method by using reliable and validated tests, it used the third questionnaire to measure engagement, instead of measuring the engagement variable as the opposite of the disengagement aspect of burnout. The research aim and instructions given to respondents with reference to the questionnaire and the scale items constituted a very clear and simple, common method, whose impact may not have been completely removed. For example, subjects are asked to report their perceptions or impressions on two or more constructs in the same survey. This is likely to produce spurious correlations among the items measuring these constructs, owing to response styles, social desirability, and priming effects, which are independent of the true correlations among the constructs being measured (Kamakura, 2015). This study also attempted to reduce mono-method bias, by validating the results with another statistical method (for instance, I used the Spearman correlation coefficient in research questions one to five and validated the answers with the

Pearson correlation coefficient). I also used MANOVA in research question six and validated the result using ANOVA. Common method bias can appear, when both the independent and dependent variables are captured using the same response method (Kock et al., 2021).

Fourth, while this study provided empirical and theoretical implications, the research method used restricted the ability to build a cause-and-effect linkage among the examined variables. The current study focused only on the dynamics of the nurse supervisor as a job resource for the nurse employees, without considering the potential influences of nurse job demands on work engagement. In other words, the present study assumed that nursing, job, and hospital-related resources would overcome a certain level of nurse job demand to produce engagement. However, the job and resources posit that the level of resources examined may not contribute to employees' work engagement when a high level of demand offsets resource availability. For example, employees might not appreciate their supervisor's servant-leader behavior, if they still struggle with a lack of discretion due to bureaucratic organizational procedures (Bao & Zhao, 2018). We will now examine areas for further research.

Future Research

Based on what was accomplished in this study, future research on this topic should address the following considerations. First, it should avoid confounding variables that might have been associated with the pandemic prevalent during this study's data collection. Future studies should consider conducting a longitudinal analysis (Cohen & Arieli, 2011) to examine changes over time.

The study shows that a servant leader may not function effectively and efficiently in isolation from other resources that can affect the burnout and engagement of the employee (for example, a servant leader needs access to resources to pay the employee, and the society must

provide adequate security for the employee to feel safe going to work). This factor should also be considered in future studies.

The study is based on cross-sectional data. The interpretations of the relationships are limited to confirming the mediating effect. The analysis focused only on the relationship between servant leadership and employee engagement. Therefore, future research might consider comparing different leadership styles and their effects on employee engagement. Future studies should also investigate the potential effects of interaction among job resources and job demands, and the differential influence of various job demands on work engagement.

Further, the assumption is that the follower responds more positively to leaders engaging in behavior that benefits others. However, empirical research has not fully investigated this aspect of the theory or the effects of multiple motives. Additional studies are needed to examine followers' perceptions of their leaders' motives to provide more evidence about the importance of leaders prioritizing others' interests.

This study is based on individual-level data analysis. It is limited to examining the workgroup-level dynamics of individuals. Therefore, it would be worthwhile to examine whether supervisors with strong servant-leader behavior could enhance the engagement of both entire work units and individuals. Future studies should investigate the effectiveness of servant leadership behavior through group-level analysis.

Finally, the data were collected in Nigeria. Further investigations in other countries would be needed to confirm the cross-cultural generalizability of the results.

Conclusions

The results of the study revealed that a nurse supervisor's servant-leader behavior is negatively and significantly related to burnout. This means that the servant leadership behavior

of the supervisor can reduce burnout in the workplace. This is very beneficial to an employee's well-being. The study also found that the servant leadership behavior of the supervisor is negatively and significantly related to the employee's work engagement. This too means that servant leadership behavior can be very useful to employers who desire their employees to be engaged, since according to extant literature there is a positive correlation between engagement and productivity. However, more servant leadership behavior did not result in less burnout or more work engagement. Some studies on servant leadership have also found that servant leaders might be poor at motivating subordinates to achieve organizational objectives, because servant leaders might place an undue priority on satisfying subordinates' needs and establishing an egalitarian culture.

The study further illustrates the effectiveness of a nurse supervisor's servant-leader behavior in the context of the hospital or other health-care institutions. The results indicated a significant positive relationship between job resources (servant leadership and work engagement) and burnout and a significant negative relationship between servant leadership and burnout.

References

- Adewa, K. and Agboola, A. (2020) Effects of Job Burnout on Employees Satisfaction in Selected Health Service Sector in Southwestern *Nigeria. Open Journal of Applied Sciences*, 10, 877-890. [https://doi: 10.4236/ojapps.2020.1012062](https://doi.org/10.4236/ojapps.2020.1012062).
- Accreditation Council for Graduate Medical Education 2016-2017 annual report. (2017). *Igniting innovation*. [https://www.acgme.org/globalassets /PDFs/PEISummary1PatientSafety.pdf](https://www.acgme.org/globalassets/PDFs/PEISummary1PatientSafety.pdf)
- Akharbin, P., Babolan, A. Z., & Baghi, A. N. (2014). The relationship between servant leadership and organizational learning and nurses' work engagement. *Journal of Research Development in Nursing and Midwifery*, 11(1), 91-98.
- Alba Martín, R. (2015). Burnout en enfermería: Prevalence y factores relacionados en el medio hospitalario. *Revista Científica de La Sociedad Española de Enfermería Neurológica*, 41(1), 9-14. <https://doi.org/10.1016/j.sedene.2015.02.001>
- AllAfrica.com. (2020, July 1). Nigeria: Health workers threaten strike over “discriminatory” hazard allowance. <https://allafrica.com/list/aans/post/af/cat/nigeria/pubkey/publisher:editorial:00011242.html>
- AllAfrica.com. (2021, August 10). Nigeria: 6 people feared dead, as IPOB's sit-at-home order records total compliance. <https://allafrica.com/stories/202108100180.html>
- American Association of Colleges of Nursing. (2022). <https://www.aacnnursing.org/news-information/fact-sheets/nursing-shortage>
- Arnetz, J., Hamblin, L. E., Sudan, S., & Arnetz, B. (2018). Organizational Determinants of Workplace Violence Against Hospital Workers. *Journal of occupational and environmental medicine*, 60(8), 693–699. <https://doi.org/10.1097/JOM.0000000000001345>

- Aslam, U., Muqadas, F., Imran, M.K. and Rahman, U.U. (2018), "Investigating the antecedents. of work disengagement in the workplace", *Journal of Management Development*, Vol. 37 No. 2, pp. 149-164. <https://doi.org/10.1108/JMD-06-2017-0210>
- Avolio, B. J. (2007). Promoting more integrative strategies for leadership theory-building. *The American Psychologist*, 62(1), 25-33. <https://doi.org/10.1037/0003-066X.62.1.25>
- Bailey, C., Madden, A., Alfes, K., & Fletcher, L. (2017). The meaning, antecedents, and outcomes of employee engagement: A narrative synthesis. *International Journal of Management Reviews*, 19(1), 31-53. <https://doi.org/10.1111/ijmr.12077>
- Demerouti E, Bakker AB, Nachreiner F, Schaufeli WB. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*. Jun;86(3):499-512. PMID: 11419809.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1).
- Bakker, A. B. (2017). Strategic and proactive approaches to work engagement. *Organizational Dynamics*, 46, 67-75. <https://doi.org/10.1016/j.orgdyn.2017.04.002>
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285. <https://doi.org/10.1037/ocp0000056>
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of occupational health psychology*, 10(2), 170–180. <https://doi.org/10.1037/1076-8998.10.2.170>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W H Freeman/Times Books/ Henry Holt & Co.

- Bao, Y., Li, C. and Zhao, H. (2018), "Servant leadership and engagement: a dual mediation model", *Journal of Managerial Psychology*, Vol. 33 No. 6, pp. 406-417. <https://doi.org/10.1108/JMP-12-2017-0435>
- Barrett, P. (2007). Structural equation modelling: Adjudging model fit. *Personality and Individual Differences*, 42(5), 815-824. <https://doi.org/10.1016/j.paid.2006.09.018>
- Barney, J., & Hesterly, W. (2008). *Strategic Management and Competitive Advantage: Concepts and Cases* (2nd ed.). Prentice-Hall.
- Bass, B. M. (1990). From Transactional to Transformational Leadership: Learning to Share the Vision. *Organizational Dynamics*, 18, 19-32. [http://dx.doi.org/10.1016/0090-2616\(90\)90061-S](http://dx.doi.org/10.1016/0090-2616(90)90061-S)
- Bass, B. M. (2008). *The Bass Handbook of Leadership*. Free Press.
- Bedarkar, M., & Pandita, D. (2014). A study on the drivers of employee engagement impacting employee performance. *Procedia-Social and Behavioral Sciences*, 133. (International Conference on Trade, Markets, and Sustainability (ICTMS-2013), 106-115. <https://doi.org/10.1016/j.sbspro.2014.04.174>
- Berger, T. A. (2014). Servant leadership 2.0: A call for strong theory. *Sociological Viewpoints*, 30(1), 146-167.
- Bergh, D. (2015). *Sample size and chi-squared test of fit — A comparison between a random sample approach and a chi-square value adjustment method using Swedish adolescent data*. Springer. <https://doi.org/10.1007/978-3-662-47490-7>
- Blau, P. M. (1964). *Exchange and Power in Social Life*. John Wiley.
- Boone, L. W., & Makhani, S. (2012). Five necessary attitudes of a servant leader. *Review of Business*, 33(1), 83-96.

- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology*, 87(1).
- Bridgeman, P. J., Bridgeman, M. B., & Barone, J. (2018). Burnout syndrome among health-care professionals. *American Journal of Health-System Pharmacy*, 75(3), 147-152.
<https://doi.org/10.2146/ajhp170460>
- Brown, S. (2018). The impact of resiliency on nurse burnout: An integrative literature review. *MEDSURG Nursing*, 27(6), 349-378. <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,sso&db=c8h&AN=133645959&site=eds>
- Burns, J. M. (1978). *Leadership*. Harper and Row.
- Burton, L. J., Welty Peachey, J., & Wells, J. E. (2017). The role of servant leadership in developing an ethical climate in sport organizations. *Journal of Sport Management*, 31(3), 229-240.
- Canavesi, A., Minelli, E. (2021) Servant Leadership and Employee Engagement: A Qualitative Study. *Employee Responsibilities and Rights* <https://doi.org/10.1007/s10672-021-09389-9>
- Cattelino, E., Testa, S., Calandri, E., Fedi, A., Gattino, S., Graziano, F., Rollero, C., & Begotti, T. (2021). Self-efficacy, subjective well-being and positive coping in adolescents with regard to Covid-19 lockdown. *Current psychology (New Brunswick, N.J.)*, 1–12.
Advance online publication. <https://doi.org/10.1007/s12144-021-01965-4>
- Casimir, G., & Ng, Y. K. (2010). Combinative aspects of leadership style and the interaction between leadership behaviors. *Leadership & Organization Development Journal*, 31(6), 501-517. <https://doi.org/10.1108/01437731011070005>

- Chan, G.K., Bitton, J.R., Allgeyer, R.L., Elliott, D., Hudson, L.R., Moulton Burwell, P., (May 31, 2021) "The Impact of COVID-19 on the Nursing Workforce: A National Overview" OJIN: *The Online Journal of Issues in Nursing* Vol. 26, No. 2, Manuscript 2.
- Chanana, N., & Sangeeta. (2020). Employee engagement practices during COVID-19 lockdown. *Journal of Public Affairs*, e2508. <https://doi.org/10.1002/pa.2508>
- Chiniara, M., & Bentein, K. (2016). Linking servant leadership to individual performance: Differentiating the mediating role of autonomy, competence and relatedness need satisfaction. *The Leadership Quarterly*, 27, 124-141. <https://doi.org/10.1016/j.leaqua.2015.08.004>
- Ching-Hong Li, J., Nesca, M., Michael Waisman, R., Cheng, Y., & Man Chung Tze, V. (2021). A robust effect size measure ω^2 for MANOVA with non-normal and non-homogenous data. *Methodological Innovations*, 14(3). <https://doi.org/10.1177/20597991211055949>
- Christian, J. S., & Ellis, A. P. J. (2014). The crucial role of turnover intentions in transforming moral disengagement into deviant behavior at work. *Journal of Business Ethics*, 119(2), 193-208. <https://doi.org/10.1007/s10551-013-1631-4>
- Cochran, C. (2017). Effectiveness and best practice of nurse residency programs: A literature review. *MEDSURG Nursing*, 26(1), 53-63
- Cohen, N., & Arieli, T. (2011). Field research in conflict environments: Methodological challenges and snowball sampling. *Journal of Peace Research*, 48(4), 423-435. <https://doi.org/10.1177/0022343311405698>

- Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P. M., & Chatterjee, G. E. (2018). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 85, 19–60. <https://doi.org/10.1016/j.ijnurstu.2018.04.016>
- da Cruz, M. P., Nunes, A. S., & Pinheiro, P. G. (2011). Fiedler's contingency theory: Practical application of the Least Preferred Coworker (LPC) Scale. *IUP Journal of Organizational Behavior*, 10(4), 7-26.
- Dansereau, F., Alutto, J. A., & Yammarino, F. J. (1984). *Theory testing in organizational behavior: The variant approach*. Prentice-Hall.
- Davis, A. (2018, January 10). *Gallup's top well-being findings of 2017*. Gallup Poll News Service.
- Davis, M. A., Cher, B. A. Y., Friese, C. R., & Bynum, J. P. W. (2021). Association of US nurse and physician occupation with risk of suicide. *The Journal of the American Medical Association* 78(6), 651-658. <https://doi.org/10.1001/jamapsychiatry.2021.0154>
- Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *The Leadership Quarterly*, 25(1), 63–82. <https://doi.org/10.1016/j.leaqua.2013.11.004>
- De Clercq, D., Bouckennooghe, D., Raja, U., & Matsyborska, G. (2014). Servant leadership and work engagement: The contingency effects of leader-follower social capital. *Human Resource Development Quarterly*, 25(2), 183-212. <https://doi:10.1002/hrdq.21185>

- Demerouti, E., & Bakker, A. B. (2008). The Oldenburg burnout inventory: A good alternative to measure burnout and engagement. In J. R. B. Halbesleben (Ed.). *Handbook of stress and burnout in health care*, (Nova Science), 65-78. <https://pdfs.semanticscholar.org/7cb5/c694cb9ad8c38e63db5d6458e34cd4fef5ce.pdf>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512. <https://doi:10.1037/0021-9010.86.3.499>
- Demerouti, E., Baker, A. B., Nachreiner, F., Schaufeli, W. B., Miner-Rubino, K., & Cortina, L. M. (2007). Oldenburg burnout inventory. *Journal of Applied Psychology*, 92(5), 1254-1269. <http://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=hpi&AN=HaPI-315858&site=eds-live>
- Demerouti, E., Van den Heuvel, M., Xanthopoulou, D., Dubbelt, L., & Gordon, H. J. (2017). *Job resources as contributors to wellbeing. In The Routledge companion to wellbeing at work* (pp. 269-283). Routledge.
- Demerouti, E., Bakker, A.B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment*, 19, 12-23.
- Deng, L., & Chan, W. (2017). Testing the difference between reliability coefficients alpha and omega. *Educational and Psychological Measurement*, 77(2), 185-203
- Dimitra, V., Lamprinou, L., Tasoulis, K., & Kravariti, F. (2021). The impact of servant leadership and perceived organizational and supervisor support on job burnout and work-life balance in the era of teleworking and COVID-19. *Leadership & Organization Development Journal*, 42(7), 1071-1088. <https://doi.org/10.1108/LODJ-12-2020-0526>

- DiNapoli, J. M., O, F. D., Musil, C., Clavelle, J. T., & Fitzpatrick, J. J. (2016). The relationship of clinical nurses' perceptions of structural and psychological empowerment and engagement on their unit. *The Journal of Nursing Administration*, 46(2), 95-100.
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, 25, 36-62. <https://doi.org/10.1016/j.leaqua.2013.11.005>
- Dissecting ongoing exodus of Nigerian health-care workers. (2022, February 5). PM News.
- Durham, M. E., Bush, P. W., & Ball, A. M. (2018). Evidence of burnout in health-system pharmacists. *American Journal of Health-System Pharmacy*, 75, S93-S100. [Htpps://doi:10.2146/ajhp170818](https://doi.org/10.2146/ajhp170818)
- Dutra, N. C. R., Nery, M. L. F., Rocha, F. C., de Andrade Neto, G. R., Fernandes, P. M. G., Torres, J. D. R. V., Ribeiro, C. D. A. L., & Barbosa, H. A. (2018). Burnout syndrome in hemodialysis professionals. *Journal of Nursing UFPE / Revista de Enfermagem UFPE*, 12(10), 2522-2527. <https://doi.org/10.5205/1981-8963-v12i10a237172p2522-2527-2018>
- Duvivier, R. J., Burch, V. C., & Boulet, J. R. (2017). A comparison of physician emigration from Africa to the United States of America between 2005 and 2015. *Human Resources for Health*, 15(1). <https://doi.org/10.1186/s12960-017-0217-0>
- Erkutlu, H., & Chafra, J. (2015). *The effects of empowerment role identity and creative role identity on servant leadership and employees' innovation implementation behavior*. Procedia - Social and Behavioral Sciences, 181. (Proceedings of the 3rd International Conference on Leadership, Technology and Innovation Management), 3-11.

- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. *The Leadership Quarterly*, 30(1), 111-132. <https://doi.org/10.1016/j.leaqua.2018.07.004>
- Faber, J., & Fonseca, L. M. (2014). How sample size influences research outcomes. *Dental press journal of orthodontics*, 19(4), 27–29. <https://doi.org/10.1590/2176-9451.19.4.027-029.ebo>
- Faraz, N. A., Ahmed F., Sultan M.Y., Mehmood A., (2021)The interplay of green servant leadership, self-efficacy, and intrinsic motivation in predicting employees’ pro-environmental behavior, *Corporate Social Responsibility and Environmental Management* Volume28, Issue4, July/August, Pages 1171-1184
- Fesun, H. (2019). Relationship between the syndrome of emotional burnout and characterological qualities of a person, comparative aspect. *Romanian Journal for Multidimensional Education / Revista Romaneasca Pentru Educatie Multidimensionala*, 11(1), 57-72. <https://doi.org/10.18662/rrem/96>
- Field, A. P. (2013). *Discovering statistics using IBM SPSS statistics: and sex and drugs and rock “n” roll* (4th ed.). SAGE.
- Freudenberger, H. J., & Richelson, G. (1985). *Burnout: The High Cost of Achievement*. Arrow.
- Garcia-Dia, M. J. (2022). The ethical recruitment of internationally educated nurses: A leadership perspective on labor migration. *Nurse Leader*, 20(1), 43-47.
- Gardner, W. L., Lowe, K. B., Moss, T. W., Mahoney, K. T., & Cogliser, C. C. (2010). Scholarly leadership of the study of leadership: A review of The Leadership Quarterly’s second decade, 2000-2009. *The Leadership Quarterly*, 21(6), 922-958. <https://doi:10.1016/j.leaqua.2010.10.003>

- Gallup Polls, (2022) *State of the Global Workplace: 2022 Report*. <https://www.gallup.com/workplace/349484/state-of-the-global-workplace-2022-report.aspx>
- Giray, M. D., & Güngör, D. (2015). Görev Yönelimli ve İlişki Yönelimli Liderlik Ölçeği: Geçerlik ve Güvenirlik Çalışması. Task-oriented and relationship-oriented leadership scale: A study for validity and reliability. *Türk Psikoloji Yazıları*, 18(35), 13-2
- Golonka, K., & Bożena, G. (2021). Individual differences and susceptibility to burnout syndrome: Sensory processing sensitivity and its relation to exhaustion and disengagement. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.751350>
- Greenleaf, R. K. (1970). *The Servant as a Leader*. Indianapolis Greenleaf Center.
- Greenleaf, R. K. (1977). *Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness*. Paulist Press.
- Greenleaf, R. K., & Spears, L. C. (2003). *Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness (25th-anniversary ed.)*. Paulist Press.
- Haar, J., Brougham, D., Roche, M. A., & Barney, A. (2017). *Servant Leadership and Work Engagement: The Mediating Role of Work-Life Balance*. Human Resources Institute of New Zealand.
- Halbesleben, J. B., & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg burnout inventory. *Work & Stress*, 19(3), 208-220. <https://doi.org/10.1080/02678370500340728>
- Hayes, A. F., & Coutts, J. J. (2020). Use omega rather than Cronbach's alpha for estimating reliability. But . . . *Communication Methods & Measures*, 14(1), 1-24. <https://doi.org/10.1080/19312458.2020.1718629>
- Hesse, H. (1956). *The Journey of the East*. Noonday Press.

- Hewitt, A. (2013). Trends in global engagement: Where do organizations need to focus attention? *Strategic HR Review*, 13(1), 24. doi:10.1108/SHR-07-2013-0073
- Hewitt, A. (2017). Trends in global employee work engagement report: Global anxiety erodes employee engagement gains. https://content.lesaffaires.com/LAF/lacom/Aon2017_Employee-Engagement.pdf
- Hitt, M. A., & Ireland, R. D. (2002). The essence of strategic leadership: Managing human and social capital. *Journal of Leadership & Organizational Studies*, 9(1), 3-14.
- Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. (2018). Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership. A meta-analysis. *Journal of Management*, 44(2), 501-529.
- Hooper, D., Coughlan, J., & Mullen, M. (2008, September). Evaluating model fit: a synthesis of the structural equation modelling literature. *In 7th European Conference on research methodology for business and management studies* (pp. 195-200).
- Howatson-Jones, I. (2004). The servant leader. *Nursing Management - UK*, 11(3), 20-24.
http://news.gallup.com/reports/199961/7.aspx?utm_source=article&utm_content=daily-employee-engagement# accessed 12/21/2017.
- Hu, L.T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55.
<https://doi.org/10.1080/10705519909540118>
- ICD-11. (2019). <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases>

- Irving, J. A., & Berndt, J. (2017). Leader purposefulness within servant leadership: examining the effect of servant leadership, leader follower-focus, leader goal-orientation, and leader purposefulness in a large U.S. health-care organization. *Administrative Sciences (2076-3387)*, 7(2), 1-20. <https://doi:10.3390/admsci7020010>
- Jahan, N. and Kim, S.W. (2021), "Understanding online community participation behavior and perceived benefits: a social exchange theory perspective", *Prince Sultan University Research Review*, Vol. 5 No. 2, pp. 85-100. <https://doi.org/10.1108/PRR-12-2019-0036>
- Jena, L. K., Pradhan, S., & Panigrahy, N. P. (2018). Pursuit of organizational trust: Role of employee engagement, psychological well-being, and transformational leadership. *Asia Pacific Management Review*, 23(3), 227-234. <https://doi10.1016/j.apmr.2017.11.001>
- Jenkins, E. Y. (2011). The effects of leader task-oriented behavior on employee performance. *Dissertation Abstracts International*, 71, 7072.
- Jha, B., & Kumar, A. (2016). Employee engagement: A strategic tool to enhance performance. *DAWN: Journal for Contemporary Research in Management*, 3(2), 21.
- Jin, L. N., Liu, T., & Chen, Y. W. (2017). *The effect of servant leadership on work-related well-being: The mediating role of workflow and work engagement*. 2017 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Industrial Engineering and Engineering Management (IEEM), 2210-2214. <https://doi.org/10.1109/IEEM.2017.8290284>
- Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language*. Scientific Software International. Lawrence Erlbaum.
- Jumaa, M., & Jasper, M. (2005). *Effective Healthcare Leadership*. Wiley.

- Kamakura, W.A. Measure twice and cut once: the carpenter's rule still applies. *Marketing Letters* 26, 237–243 (2015). <https://doi.org/10.1007/s11002-014-9298-x>
- Kalshoven, K., Den Hartog, D. N., & De Hoogh, A. H. B. (2011). Ethical Leadership at Work Questionnaire (ELW): Development and validation of a multidimensional measure. *Leadership Quarterly*, 22, 51-69.
- Kaur, S. (2017). Antecedents and consequences of employee engagement: A literature review. *International Journal of Latest Technology in Engineering, Management & Applied Science*. Volume VI, Issue IV, April 2017 | ISSN 2278-2540
- Kaya, B., & Karatepe, O. M. (2020). Does servant leadership better explain work engagement, career satisfaction, and adaptive performance than authentic leadership? *International Journal of Contemporary Hospitality Management*, 32(6), 2075-2095.
- Kahn, K. E., Kahn, S. E., & Chaudhry, A. G. (2015). Impact of servant leadership on workplace spirituality: Moderating role of involvement culture. *Pakistan Journal of Science*, 67(1), 109-113.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724. <https://doi.org/10.2307/256287>
- Keith, K. M. (2008). *The Key Practices of Servant Leadership*. <https://faithformationlearningexchange.net/uploads/5/2/4/6/5246709/thekeypracticesofservant-leaders.pdf>
- Kirigia, M. (2013). *Efficiency of Health System Units in Africa: A Data Envelopment Analysis*. University of Nairobi Press.
- Kock, F., Berbekova, A., & Assaf, A. G. (2021). Understanding and managing the threat of common method bias: Detection, prevention, and control. *Tourism Management*, 86. <https://doi.org/10.1016/j.tourman.2021.104330>

- Krishnaveni, R., & Monica, R. (2016). Identifying the drivers for developing and sustaining engagement among employees. *IUP Journal of Organizational Behavior*, 15(3), 7-1.
- Kronos releases results of new survey, Employee engagement in nursing. (2017, May 11). Wireless News.
- Kouzes, J. M., & Posner, B. Z. (1995). *The Leadership Challenge: How to Keep Getting Extraordinary Things Done in Organizations* (2nd ed.). Jossey-Bass.
- Kowske, B., Lundby, K., & Rasch, R. (2009). Turning “survive” into “thrive”: Managing survivor engagement in a downsized organization. *People & Strategy*, 32(4), 48-56.
- Langan, J. (1978). Book review: Servant leadership. *Theological Studies* 39(1), 189-190.
- Lasebikan, V.O., Oyetunde, M.O, (2012), "Burnout among Nurses in a Nigerian General Hospital: Prevalence and Associated Factors", *International Scholarly Research Notices*, vol. 2012, Article ID 402157, 6 pages, 2012. <https://doi.org/10.5402/2012/402157>
- Laub, J. (1999). Assessing the servant organization: Development of the Servant Organizational Leadership (SOLA) instrument. *Dissertation Abstracts International*, 60(2), 308. (UMI No. 9921922).
- Law, H., & Aquilina, R. (2013). Developing a health-care leadership coaching model using action research and systems approaches — a case study: Implementing an executive coaching program to support nurse managers in achieving organizational objectives in Malta. *International Coaching Psychology Review*, 8(1), 54-71.
- Levine, H. S. (2019). Physician burnout. , *The Journal of the American Medical Association* 321(5), 513-514. <https://doi.org/10.1001/jama.2018.19000>

- Liden, R. C., Wayne, S. J., Chenwei, I., & Meuser, J. D. (2014). Servant leadership and serving culture: Influence on individual and unit performance. *Academy of Management Journal*, 57(5), 1434-1452. <https://doi:10.5465/amj.2013.0034>
- Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (2008). Servant leadership: development of a multidimensional measure and multilevel assessment. *The Leadership Quarterly*, 19(2), 161-177.
- Liden, R. C., Wayne, S. J., Meuser, J. D., Hu, J., Wu, J., & Liao, C. (2015). Servant leadership: Validation of a short form of the SL-28. *The Leadership Quarterly*, 26(2), 254. <https://doi.org/10.1016/j.leaqua.2014.12.002>
- Lisa-Gutierrez, T. K. C. S. (2020, November 16). KC nurse: “My world is crumbling.” Health-care workers’ COVID burnout raises alarms. *The Kansas City Star*. (MO).
- Longo, J. (2013). Bullying and the older nurse. *Journal of Nursing Management*, 21(7), 950-955. <https://doi.org/10.1111/jonm.12173>
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership development. *Positive Organizational Scholarship*, 241(258), 1-26.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 1(1), 3-30. <https://doi:10.1111/j.1754-9434.2007.0002.x>
- Mahdi, O. R., & Almsafir, M. K. (2014). *The role of strategic leadership in building sustainable competitive advantage in the academic environment. Procedia-Social and Behavioral Sciences*, 129. (2nd International Conference on Innovation, Management and Technology Research), 289-296. <https://doi:10.1016/j.sbspro.2014.03.679>

- Makaroff, K. S., Storch, J., Pauly, B., & Newton, L. (2014). Searching for ethical leadership in nursing. *Nursing Ethics*, 21(6), 642-658. <https://doi:10.1177/0969733013513213>
- Maslach, C., Jackson, S. E., Leiter, M. P., McLean, S., Wade, T. D., & Encel, J. S. (2003). Maslach Burnout Inventory (3rd ed.). *Behavioral and Cognitive Psychotherapy*, 31(4), 417-428. <https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,sso&db=hpi&AN=HaPI-307327&site=eds-live>
- Maslach, C., Jackson, S. E., Leiter, M. P., Toppinen-Tanner, S., Ojajarvi, A., Vaananen, A., Kalimo, R., & Jappinen, P. (2005). Maslach Burnout Inventory — general survey. [English version]. *Behavioral Medicine*, 31, 18-27.
- Maslach, C., Jackson, S. E., Shanafelt, T. D., West, C. P., Sinsky, C., Trockel, M., Tutty, M., Satele, D. V., Carlasare, L. E., & Dyrbye, L. N. (2019). Maslach Burnout Inventory. *Mayo Clinic Proceedings*, 94(9), 1681-1694.
- Maslach, C., & Leiter, M. P. (2010). Reversing burnout: How to rekindle your passion for your work. *Institute of Electrical and Electronics Engineers Inc. Engineering Management Review*, 38(4), 91-96. <https://doi.org/10.1109/EMR.2010.5645760>
- Maslach, C., & Zimbardo, P. G. (1982). *Burnout: The Cost of Caring*. Prentice-Hall.
- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior*, 70(1), 149-171. <https://doi.org/10.1016/j.jvb.2006.09.002>
- May, D. R., Gilson, R. L., & Harter, L. M. (2004) The psychological conditions of meaningfulness, safety, and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77, 11-37. <https://dx.doi.org/10.1348/096317904322915892>

- McNeish, D. (2018). Thanks to the coefficient alpha, we'll take it from here. *Psychological Methods*, 23(3), 412.
- McCallum, S., & O'Connell, D. (2009). Social capital and leadership development: Building stronger leadership through enhanced relational skills. *Leadership & Organization Development Journal*, 30(2), 152-166
- McCune Stein, A., & Ai Min, Y. (2019). The dynamic interaction between high-commitment HRM and servant leadership: A social exchange perspective. *Management research Review*, 42(10), 1169-1186.
- Medscape Report. (2019). *Medscape National Physician Burnout, Depression & Suicide Report*. <https://www.acam.org/news/444019/Medscape-National-Physician-Burnout-Depression--Suicide-Report-2019.htm>
- Mertel, T., & Brill, C. (2015). What every leader ought to know about becoming a servant leader. *Industrial & Commercial Training*, 47(5), 228-235.
- Merisalo, L. J. (2016, March 1). Tips to tackle the employee engagement crisis: Only 1 in 3 employees actively engaged at work. *Health-care Registration*, 25(6).
- Meuser, J. D., Gardner, W. L., Dinh, J. E., Hu, J., Liden, R. C., & Lord, R. G. (2016). A Network Analysis of Leadership Theory: The Infancy of Integration. *Journal of Management*, 42(5). 1374-1403.
- Milacci, S. J. (2021). The relationship between servant leadership and burnout of retail managers [ProQuest Information & Learning]. In *Dissertation Abstracts International Section A: Humanities and Social Sciences* (Vol. 82, Issue 10-A).

- Mirvis, P. (2012). Employee engagement and CSR: Transactional, relational, and developmental approaches. *California Management Review*, 54(4), 93-117. <https://doi.org/10.1525/cmr.2012.54.4.93>
- Mohammed, A., Khalid, D., & Mohammed, H. H. (2020). Servant leadership and academics outcomes in higher education: the role of job satisfaction. *International Journal of Organizational Analysis*, 29(3), 562-584. <https://doi.org/10.1108/IJOA-11-2019-1923>
- Moodie, S., Dolan, S., & Burke, R. (2014). Exploring the causes, symptoms, and health consequences of joint and inverse states of work engagement and burnout: The specific case of nurses in Spain. *Management Research: The Journal of the Iberoamerican Academy of Management*, 12(1), 4-22. <https://doi.org/10.1108/MRJIAM-05-2013-0506>
- Moss, J. (2019). *Burnout Is About Your Workplace, Not Your People*. Harvard Business School.
- Morison, S. (2018). *Leadership for Improvement*. Nova Science Publishers, Inc.
- Moukarzel, A., Michelet, P., Durand, A.-C., Sebbane, M., Bourgeois, S., Markarian, T., Bompard, C., & Gentile, S. (2019). *Burnout syndrome among emergency department staff: Prevalence and associated factors*. <https://doi.org/10.1155/2019/6462472>
- Neider, L. L., & Schriesheim, C. A. (2011). The Authentic Leadership Inventory (ALI): Development and empirical tests. *The Leadership Quarterly*, 22, 1146-1164. <https://doi:10.1016/j.leaqua.2011.09.008>
- Newman, A., Schwarz, G., Cooper, B., & Sendjaya, S. (2017). How servant leadership influences organizational citizenship behavior: the roles of LMX, empowerment, and proactive personality. *Journal of Business Ethics*, 145(1), 49-62.
- Northouse, P. G. (2010). *Leadership: Theory and Practice*. SAGE.
- Nunnally, J. C., Jr. (1970). *Introduction to Psychological Measurement*. McGraw-Hill.

- Nzor, e., (2022) Unions Decry High Rate of Medical Tourism as Nigerians Spend \$1bn on Healthcare <https://guardian.ng/appointments/unions-decry-high-rate-of-medical-tourism-as-nigerians-spend-1bn-on-healthcare/>
- O'Brien, M. E. (2014). *Spirituality in Nursing: Standing on Holy Ground* (5th ed.). Jones & Bartlett Learning.
- Ogunbamila, B. (2018). Positive employee behaviors and occupational burnout in health-care workers: Moderating roles of work engagement. *Indian Journal of Positive Psychology*, 9(3), 404-412.
- Okediran, J. O., Ilesanmi, O. S., Fetuga, A. A., Onoh, I., Afolabi, A. A., Ogunbode, O., Olajide, L., Kwaghe, A. V., & Balogun, M. S. (2020). The experiences of health-care workers during the COVID-19 crisis in Lagos, Nigeria: A qualitative study. *GERMS*, 10(4), 356.
- Onah, C. K., Azuogu, B. N., Ochie, C. N., Akpa, C. O., Okeke, K. C., Okpunwa, A. O., Bello, H. M., & Ugwu, G. O. (2022). Physician emigration from Nigeria and the associated factors: the implications to safeguarding the Nigeria health system. *Human Resources for Health*, 20(1), 85. <https://doi.org/10.1186/s12960-022-00788-z>
- Ozumba, L. N., & Alabere, I.D., (2019) Burnout among doctors and nurses at university of Port Harcourt Teaching Hospital, South-South Nigeria, *Archives of Medicine and Health Sciences*, Volume 7, Issue 1, Page : 61-68
- Ozturk, A., Karatepe, O. M., & Okumus, F. (2021). The effect of servant leadership on hotel employees' behavioral consequences: Work engagement versus job satisfaction. *International Journal of Hospitality Management*, 97. <https://doi.org/10.1016/j.ijhm.2021.102994>

- Owuor, R. A., Mutungi, K., Anyango, R., & Mwita, C. C. (2020). Prevalence of burnout among nurses in sub-Saharan Africa: A systematic review. *JBIS Evidence Synthesis*, 18(6), 1189-1207. <https://doi.org/10.11124/JBISIR-D-19-00170>
- Page, D., & Wong, T. P. (2000). A conceptual framework for measuring servant leadership. *The human factor in shaping the course of history and development*, 69, 110.
- Palanski, M. E., & Yammarino, F. J. (2011). Impact of behavioral integrity on follower job performance: A three-study examination. *The Leadership Quarterly*, 22, 765-786. <https://doi.org/10.1016/j.leaqua.2011.05.014>
- Palmer, B., & Prado-Inzerillo, M. (2017). *Nurse Engagement*. Springer.
- Panaccio, A., Henderson, D. J., Liden, R. C., Wayne, S. J., & Cao, X. (2015). Toward an understanding of when and why servant leadership accounts for employee extra-role behaviors. *Journal of Business and Psychology*, 30(4), 657-675.
- Parke, C.S. (2013). *Essential First Steps to Data Analysis: Scenario-Based Examples Using SPSS*. SAGE Publications, Inc. <https://doi.org/10.4135/9781506335148>
- Patterson, K. (2003). *Servant Leadership: A Theoretical Model*. (Doctoral dissertation, Regent University, 2003). *Dissertation Abstracts International*, 64/02, 570.
- Patterson K., (2003) *Servant Leadership: A Theoretical Model: Servant Leadership Research Roundtable*. https://www.regent.edu/wpcontent/uploads/2020/12/Patterson_servant_leadership.pdf
- Peters, D. E., Casale, S. A., Halyard, M. Y., Frey, K. A., Bunkers, B. E., & Caubet, S. L. (2014). The evolution of leadership: A perspective from Mayo clinic. *Physician Executive*, 40(3), 24-32

- Pierro, A., Kruglanski, A. W., & Raven, B. H. (2012). Motivational underpinnings of social influence in work settings: Bases of social power and the need for cognitive closure. *European Journal of Social Psychology*, 42(1), 41-52. <https://doi:10.1002/ejsp.836>
- Popli, S., & Rizvi, I. A. (2016). Drivers of employee engagement: The role of leadership style. *Global Business Review*, 17(4), 965. <https://doi:10.1177/0972150916645701>
- Prata, J., & Pereira, S. M. (2011). P02-530 —The evaluation of burnout syndrome in a Portuguese sample of health professionals. *European Psychiatry*, 26(Supplement 1), 1126. [https://doi.org/10.1016/S0924-9338\(11\)72831-0](https://doi.org/10.1016/S0924-9338(11)72831-0)
- Rajan, S., & Engelbrecht, A. (2018). A cross-sectional survey of burnout amongst doctors in a cohort of public sector emergency centres in Gauteng, South Africa. *African Journal of Emergency Medicine*, 8(3), 95-99. <https://doi.org/10.1016/j.afjem.2018.04.001>
- Rastogi, A., Pati, S. P., Dixit, J. K., & Kumar, P. (2018). Work disengagement among SME workers: evidence from India. *Benchmarking: An International Journal*, 25(3), 968-980. <https://doi.org/10.1108/BIJ-07-2017-0189>
- Reed, R., & Defillippi, R. J. (1990). Causal ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review*, 15(1), 88-102. <https://doi:10.5465 /AMR.1990.4308277>
- Rholetter, W. (2021). *Burnout (psychology)*. Salem Press Encyclopedia.
- Spence Laschinger, H.-K., Wong, C.-A., & Greco, P. (2006). The impact of staff nurse empowerment on person-job fit and work engagement/burnout. *Nursing Administration Quarterly*, 30(4), 358-367. <https://doi.org/10.1097/00006216-200610000-00008>

- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635.
<https://doi:10.5465/AMJ.2010.51468988>
- Rivera, R. R., Fitzpatrick, J. J., & Boyle, S. M. (2011). Closing the RN engagement gap: Which drivers of engagement matter? *Journal of Nursing Administration*, 41(6), 265-272.
<https://doi:10.1097/NNA.0b013e31821c476c>
- Rudolph, C. W., Allan, B., Clark, M., Hertel, G., Hirschi, A., Kunze, F., Shockley, K., Shoss, M., Sonnentag, S., & Zacher, H. (2021). Pandemics: Implications for research and practice in industrial and organizational psychology. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 14(1-2), 1-35. <https://doi.org/10.1017/iop.2020.48>
- Rushton, C., Batcheller, J., Schroeder, K., & Donohue, P. (2015). Burnout and resilience among nurses practicing in high-intensity settings. *American Journal of Critical Care*, 24(5), 412-420. <https://doi:10.4037/ajcc20155291>
- Russell, K. (2016). Perceptions of burnout, its prevention, and its effect on patient care as described by oncology nurses in the hospital setting. *Oncology Nursing Forum*, 43(1), 103-109. <https://doi.org/10.1188/16.ONF.103-109>
- Russell, R.F. and Gregory Stone, A. (2002), "A review of servant leadership attributes: developing a practical model", *Leadership & Organization Development Journal*, Vol. 23 No. 3, pp. 145-157. <https://doi.org/10.1108/01437730210424>
- Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? *Human Resource Development Quarterly*, 25(2), 155-182. <https://doi:10.1002/hrdq.21187>

- Sawan, F. (2020). Servant Leadership: Antecedent Factors, Impact, and Education Theories Used as Researcher's Perspective. *International Journal of Higher Education*, 9(5), 60-75.
- Scanlan, J. N., & Still, M. (2019). Relationships between burnout, turnover intention, job satisfaction, job demands, and job resources for mental health personnel in an Australian mental health service. *BMC Health Services Research*, 19(1), 1-11. <https://doi.org/10.1186/s12913-018-3841-z>
- Schaufeli, W. B., Bakker, A. B., Salanova, M., Garczynski, A. M., Waldrop, J. S., Rupprecht, E. A., & Grawitch, M. J. (2013). Utrecht Work Engagement Scale — 9. [English version]. *Journal of Occupational Health Psychology*, 18(4), 417-429.
- Schaufeli, W. B. (2017). Applying the job demands-resources model. A “how-to” guide to measuring and tackling work engagement and burnout. *Organizational Dynamics*, 46 (Special Issue: Employee Engagement), 120-132. <https://doi:10.1016/j.orgdyn.2017.04.008>
- Schaufeli, W., Leiter, M. P., Maslach, C., Jackson, S. E., Willard-Grace, R., Knox, M., Huang, B., Hammer, H., Kivlahan, C., & Grumbach, K. (2019). Maslach Burnout Inventory — general survey. *Annals of Family Medicine*, 17(1), 36-41.
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker (Ed.), *Work Engagement: A Handbook of Essential Theory and Research*. (pp. 10-24). Psychology Press.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701-716. <https://doi.org/10.1177/0013164405282471>

- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two-sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Servant Leadership Institute. (2019). <https://www.servantleadershipinstitute.com/>
- Shamoo A. E. (2013). Data audit as a way to prevent/contain misconduct. *Accountability in Research*, 20(5-6), 369–379. <https://doi.org/10.1080/08989621.2013.822259>
- Shim, D. C., Park, H. H., Keum, J., & Kim, S. (2021). Street-level bureaucrats' work engagement: Can public managers' servant-leader orientation make a difference? *Public Personnel Management*, 50(3), 307-326. <https://doi.org/10.1177/0091026020941043>
- Shuck, B., Ghosh, R., Zigarmi, D., & Nimon, K. (2012). The jingle jangle of employee engagement: Further exploration of the emerging construct and implications for workplace learning and performance. *Human Resource Development Review*, 12, 11-35
- Shuck, B., Reio, T. G., & Rocco, T. S. (2011). Employee engagement: an examination of antecedent and outcome variables. *Human Resource Development International*, 14(4), 427-445. <https://doi.org/10.1080/13678868.2011.601587>
- Singh, N., Wright, C., Knight, K., Baird, M., Akroyd, D., Adams, R. D., & Schneider, M. E. (2017). *Occupational burnout among radiation therapists in Australia: Findings from a mixed-methods study. Radiography*. <https://doi.org/10.1016/j.radi.2017.03.016>
- Sousa, M. J. C., & van Dierendonck, D. (2017). Servant leadership and the effect of the interaction between humility, action, and hierarchical power on follower engagement. *Journal of Business Ethics*, 141(1), 13-25.
- Spears, L. C. (2010). Character and servant leadership: Ten characteristics of effective, caring leaders. *The Journal of Virtues & Leadership*, 1, 25-30.

- Spence Laschinger, H. K., Leiter, M., Day, A., & Gilin, D. (2009). Workplace empowerment, incivility, and burnout: impact on staff nurse recruitment and retention outcomes. *Journal of Nursing Management*, 17(3), 302–311. <https://doi.org/10.1111/j.1365-2834.2009.00999.x>
- Sullivan, V., Hughes, V., & Wilson, D. R. (2022). Nursing burnout and its impact on health. *Nursing Clinics of North America*, 57(1), 153-169. <https://doi.org/10.1016/j.cnur.2021.11.011>
- Sullivan, G. M., & Artino, A. R., Jr (2013). Analyzing and interpreting data from likert-type scales. *Journal of Graduate Medical Education*, 5(4), 541–542. <https://doi.org/10.4300/JGME-5-4-18>
- Summerfield, M. R. (2014). Leadership: A simple definition. *American Journal of Health-System Pharmacy*, 71(3), 251-253. <https://doi.org/10.2146/ajhp130435>
- Stanislaw P. A. Stawicki. (2018). *Fundamentals of Leadership for Healthcare Professionals*. Nova Medicine and Health.
- Stogdill, R. M. (1974). *Handbook of Leadership: A Survey of the Literature* Free Press. Literature Free Press.
- Sturm, B. (2009). Principles of servant-leadership in community health nursing: management issues and behaviors discovered in ethnographic research. *Home Health Care Management & Practice*, 21(2), 82-89.
- Taber, K.S (2018).The Use of Cronbach’s Alpha When Developing and Reporting Research Instruments in Science Education. *Research Science Education*, 48, 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>

- Tabernero, C., Chambel, M. J., Curral, L., & Arana, J. M. (2009). The role of task-oriented versus relationship-oriented leadership on normative contract and group performance. *Social Behavior & Personality: An International Journal*, 37(10), 1391-1404.
- Tankwanchi, A. S., Hagopian, A., & Vermund, S. H. (2021). African physician migration to high-income nations: “Doctor retention: A cross-sectional study of how Ireland has been losing the battle.” *International Journal of Health Policy and Management*, 10(10), 660. <https://doi.org/10.34172/ijhpm.2020.219>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Trastek, V. F., Hamilton, N. W., & Niles, E. E. (2014). Leadership models in health care - a case for servant leadership. *Mayo Clinic Proceedings*, 89(3), 374–381. <https://doi.org/10.1016/j.mayocp.2013.10.012>
- Tropello, P. D., & DeFazio, J. (2014). Servant leadership in nursing administration and academia shaping future generations of nurses and interdisciplinary team providers to transform health care delivery. *Nurse Leader*, 12, 59, 66-61, 66. <https://doi:10.1016/j.mnl.2014.09.01>
- Umanets, Y. (2022). Examining servant leadership and burnout among NCAA student-athletes [ProQuest Information & Learning]. In *Dissertation Abstracts International: Section B: The Sciences and Engineering* (Vol. 83, Issue 2-B).
- University of Tokyo reports findings in nursing administration (*The effect of work environment on burnout among nursing directors: A cross-sectional study*). (2020, January 31). Health & Medicine Week.

- Valero-Chillerón, M. J., González-Chordá, V. M., López-Peña, N., Cervera-Gasch, Á., Suárez-Alcázar, M. P., & Mena-Tudela, D. (2019). Burnout syndrome in nursing students: An observational study. *Nurse Education Today*, 76, 38-43. <https://doi.org/10.1016/j.nedt.2019.01.014>
- van Dierendonck, D. (2011). Servant Leadership: A Review and Synthesis. *Journal of Management*, 37(4), 1228–1261. <https://doi.org/10.1177/0149206310380462>
- van Dierendonck, D., & Patterson, K. (2010). *Servant Leadership: Developments in Theory and Research*. Palgrave Macmillan UK.
- van Dierendonck, D., & Nuijten, I. (2011). The servant leadership survey: Development and validation of a multidimensional measure. *Journal of Business and Psychology*, 26(3), 249.
- van Dierendonck, D., Sousa, M., Gunnarsdóttir, S., Bobbio, A., Hakanen, J., Verdorfer, A. P., Duyan, E. C., & Rodriguez-Carvajal, R. (2017). The cross-cultural invariance of the servant leadership survey: A comparative study across eight countries. *Administrative Sciences* (2076-3387), 7(2), 1-11. <https://doi:10.3390/admsci7020008>
- Waddill-Goad, S. (2016). *Nurse burnout: combating stress in nursing*. Sigma Theta Tau International.
- Wang, W., Kang, S. W., & Choi, S. B. (2022). Servant leadership and creativity: A study of the sequential mediating roles of psychological safety and employee well-being. *Frontiers in Psychology*, 12, 6670.
- Waterman, H. (2011). Principles of “servant leadership” and how they can enhance practice. *Nursing Management - UK*, 17(9), 24-26 3p.

- Whetstone, J. (2002). Personalism and moral leadership: the servant leader with a transforming vision. *Business Ethics: A European Review*, 11(4), 385-392.
- Wiles, L. K., Kay, D., Luker, J. A., Worley, A., Austin, J., Ball, A., Bevan, A., Cousins, M., Dalton, S., Hodges, E., Horvat, L., Kerrins, E., Marker, J., McKinnon, M., McMillan, P., Pinero de Plaza, M. A., Smith, J., Yeung, D., & Hillier, S. L. (2022). Consumer engagement in health-care policy, research, and services: A systematic review and meta-analysis of methods and effects. *The Public Library of Science* 17(1), 1-26.
<https://doi.org/10.1371/journal.pone.0261808>
- Wiroko, E. P. (2021). The role of servant leadership and resilience in predicting work. *Journal of Resilient Economies*, 1(1). <https://doi.org/10.25120/jre.1.1.2021.3821>
- Wollard, K. K., & Shuck, B. (2011). Antecedents to employee engagement: A structured review of the literature. *Advances In Developing Human Resources*, 13(4), 429-446. [https://doi: 10.1177/1523422311431220](https://doi.org/10.1177/1523422311431220)
- Woo, T., Ho, R., Tang, A., & Tam, W. (2020). Global prevalence of burnout symptoms among nurses: A systematic review and meta-analysis. *Journal of Psychiatric Research*, 123, 9-20. <https://doi.org/10.1016/j.jpsychires.2019.12.015>
- Wu, J., Liden, R. C., Liao, C., & Wayne, S. J. (2020). Does manager servant leadership lead to follower-serving behaviors? It depends on the follower's self-interest. *Journal of Applied Psychology*, 106(1), 152-167.
- Yadav, L. K. (2016). Employee engagement among academicians: Interaction effect of perceived organizational support and individualism. *Vilakshan: The XIMB Journal of Management*, 13(1), 21-38.

Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *The Academy of Management Perspectives*, 26(4), 66–85.

<https://doi.org/10.5465/amp.2012.0088>

Zeeshan S, Ng S. I., Ho J.A, & Jantan A .M., (2021) Assessing the impact of servant leadership on employee engagement through the mediating role of self-efficacy in the Pakistani banking sector, *Cogent Business & Management*, 8:1, 1963029, <https://doi: 10.1080/23311975.2021.1963029>

Zhu, W., Zhou, J., Lau, W.K.(E). and Welch, S. (2020), "How harmonious family encourages individuals to enter entrepreneurship: A view from conservation of resource theory", *International Journal of Conflict Management*, Vol. 31 No. 3, pp. 333-351. <https://doi.org/10.1108/IJCMA-09-2019-0176>

APPENDICES

Appendix A. Approval of Study by Seton Hall University Institutional Review Board



June 26, 2020

Michael Otuwurunne
31 Chamberlain Avenue
Little Ferry, NJ 07643

Re: Study ID# 2020-118

Dear Mr. Otuwurunne,

At its June 24, 2020 meeting, the Research Ethics Committee of the Seton Hall University Institutional Review Board reviewed and approved your research proposal entitled “Exploring the Relationship between Employee Perception of Servant Leadership Style of Supervisor and Employee Self-Assessment of Engagement and Burnout in Nigeria” as submitted. This memo serves as official notice of the aforementioned study’s approval. Enclosed for your records are the stamped original Consent Form and recruitment flyer. You can make copies of these forms for your use.

The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research protocol, informed consent form or study team must be reviewed and approved by the IRB prior to their implementation.

You will receive a communication from the Institutional Review Board at least 1 month prior to your expiration date requesting that you submit an Annual Progress Report to keep the study active, or a Final Review of Human Subjects Research form to close the study. In all future correspondence with the Institutional Review Board, please reference the ID# listed above.

Thank you for your cooperation.

Sincerely,



Mara C. Podvey, PhD, OTR
Associate Professor
Co-Chair, Institutional Review Board

Office of the Institutional Review Board

Presidents Hall · 400 South Orange Avenue · South Orange, New Jersey 07079 · Tel: 973.275.4654 · Fax 973.275.2978 ·
www.shu.edu

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Appendix B. Research Study Invitation



Seton Hall University
Institutional Review Board

JUN 29 2020

Approval Date

Expiration Date

JUN 29 2021

RESEARCH STUDY INVITATION

Exploring the Relationship between Employee Perception of Servant Leadership Style of the Supervisor and Employee Self-Assessment of Engagement and Burnout in Nigeria

This study invites registered nurses working in the University of Nigeria Teaching Hospital, University of Port-Harcourt Teaching Hospital or University of Lagos Teaching Hospital to participate.

Participants must be:

- nurses working full-time in one of these three hospitals
- at least eighteen years old and not more than sixty-five years
- a registered nurse
- responsible to a supervisor or under a manager
- able to communicate in English

Purpose of the Study:

This study will explore if there is a relationship between how a nurse employee views their supervisor/manager as a servant leader and how that nurse employee self-rates themselves regarding work engagement and regarding burnout.

Expected Duration of Participation:

The study surveys will take around 20 minutes to complete.

Voluntary Nature of the Study:

Participation is optional and one can stop participating at any time. No questions will be asked.

Anonymity and Confidentiality:

No personal data will be collected in the study. The answers are kept private. And, the study results will be reported as averages or aggregates to further protect anonymity of the data.

To participate in the study:

The principal investigator will be on-site on Friday 3rd of July to meet with nurses at the nurses meeting in the auditorium and on Thursday the 16th of July in nursing lounges on the wards by 3pm

For more details, please contact:

Name: Michael Otuwurunne (Principal Investigator). Email: otuwurmi@shu.edu

School of Health and Medical Sciences
Department of Interprofessional Health Sciences
and Health Administration
Interprofessional Health Sciences Campus (IHS)
340 Kingsland Street, Building 123, Nutley, NJ 07110
www.shu.edu

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Appendix C. Introduction of the Principal Investigator



July 12, 2019

The University of Nigeria Teaching Hospital
The Chairman Ethical Committee,
Enugu
Enugu State, Nigeria

Re.: Michael Otuwurunne, PhD Candidate

Dear Doctor,

I am writing to introduce Michael Otuwurunne, one of our PhD in Health Science students. Michael is in the dissertation phase of his doctoral studies and in this regard, he is hoping to receive permission from your organization to solicit participants for his study from nurses in your organization. Michael will provide the details of his study for your consideration. In addition to my role as Chair of our Department of Inter-professional Health Sciences and Health Administration, I am also Michael's dissertation committee Chair, so I am very familiar with his study. If I may be of any assistance in your consideration of Michael's request, please feel free to contact me.

Sincerely,

Terrence F. Cahill, EdD, FACHE
Chair, Dept. of Interprofessional Health Sciences and Health Administration


Appendix D. University of Nigeria Teaching Hospital Ethical Clearance Certificate

UNIVERSITY OF NIGERIA TEACHING HOSPITAL
ITUKU-OZALLA, P.M.B. 01129, ENUGU
E-mail: cmdunth2011@yahoo.com

Chairman UNTH Management Board

Barry, S. IKE NKUME,
LLB (Hons), BL MPA; B.Ed(Pol. Sc.); AHAN
Director of Administration Secretary
UNTH Management Board

UNTH/CSA/329/VOL.5
Our Ref: _____



Dr. C. C. AMAH, MBBS, FWACS, FICS, FRCR, FCE
Chief Medical Director

Dr. OBINNA D. ONODUGO, MBBS, FWACP
Chairman Medical Advisory Committee

Date: 31st July, 2019

NHREC/05/01/2008B-FWA00002458-1RB00002323

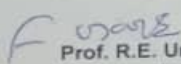
ETHICAL CLEARANCE CERTIFICATE

TOPIC: SERVANT LEADERSHIP STYLE OF SUPERVISORS AND EMPLOYEE SELF-ASSESSMENT OF ENGAGEMENT AND BURNOUT.

BY: MICHAEL OTUWURUNNE

FOR: RESEARCH PURPOSE

This research project on the above topic was reviewed and approved by the University of Nigeria Teaching Hospital Health Research Ethics Committee. This certificate is valid for one year from date of issue. Please note that the Committee Reserves the Right to monitor the Conduct of the study at any time for strict Compliance to the Protocol.


Prof. R.E. Umeh
Chairman, Health Research Ethics Committee

Date: 5/8/2019

Appendix E. Lagos University Teaching Hospital Ethical Committee Notice of Exemption

LAGOS UNIVERSITY TEACHING HOSPITAL HEALTH RESEARCH ETHICS COMMITTEE

PRIVATE MAIL BAG 12003, LAGOS, NIGERIA
e-mail address: luthethics@yahoo.com



Chairman
PROF. N.U. OKUBADEJO
MB. ChB, FMCP

Administrative Secretary
D.J. AKPAN
B.Sc. (Hons) BUS. ADMIN,
MIHSAN

Chief Medical Director:
PROF. CHRIS BODE
FMCS (NIG) FWACS

Chairman, Medical Advisory Committee
PROF. O.A. FASANMADE
MBBS, FWACP, FACE, FNSEM

LUTH HREC REGISTRATION NUMBER: NHREC: 19/12/2008a
Office Address: Room 107, 1st Floor, LUTH Administrative Block
Telephone: 234-1-5850737, 5852187, 5852209, 5852158, 5852111

31st January, 2020

NOTICE OF EXEMPTION

PROJECT TITLE: "EXPLORING THE RELATIONSHIP BETWEEN EMPLOYEE PERCEPTION OF SERVANT LEADERSHIP STYLE OF SUPERVISOR AND EMPLOYEE SELF-ASSESSMENT OF ENGAGEMENT AND BURNOUT".

HEALTH RESEARCH COMMITTEE ASSIGNED NO.: ADM/DCST/HREC/APP/3472

NAME OF PRINCIPAL INVESTIGATOR: MICHAEL OTUWURUNNE

ADDRESS OF PRINCIPAL INVESTIGATOR: DEPT. OF INTERPROFESSIONAL HEALTH SCIENCES AND HEALTH ADMINISTRATION, SETON HALL UNIVERSITY, NJ, USA.

DATE OF RECEIPT OF VALID APPLICATION: 29-01-2020

This is to inform you that the research described in the submitted protocol, the consent forms, and all other related materials where relevant have been evaluated and are exempted from full review by the Lagos University Teaching Hospital Health Research Ethics Committee (LUTHHREC).

All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study. In multiyear research, endeavor to submit your annual report to the HREC early in order to obtain renewal of your approval and avoid disruption of your research.

The National code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations and with the tenets of the code including ensuring that all adverse events are reported promptly to the HREC. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the code. The HREC reserves the right to conduct compliance visits to your research site without previous notification.


PROF. N. U. OKUBADEJO
CHAIRMAN, LUTH HEALTH RESEARCH ETHICS COMMITTEE

Appendix F. University of Port-Harcourt Teaching Hospital Ethical Approval

UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL

P.M.B. 6173. PORT HARCOURT - website: www.upthng.com

CHAIRMAN
HIS EXCELLENCY
MUHKAR AHMED ANKA (SARDAUNAN ANKA)

AG. DIRECTOR OF ADMINISTRATION
AKIE OPUENE HART
B.Sc. M.Sc. (PH) FIMC, FICAN, CMC. AHAN



CHIEF MEDICAL DIRECTOR
PROF. HENRY A. A. UGBOMA, MNIM, JP
B.Sc, MBBS, FWACS, FICS

AG. CHAIRMAN, MEDICAL ADVISORY COMMITTEE
PROF. PRINCEWILL C. STANLEY
B.Med (Pharmacol) MBBS, FWACP, FMCpsy, MNIM

Prof. A. O. U. Okpani
(Consultant Gynaecologist)
Chairman

Dr. D. D. Alasia
(Consultant Physician)
Member

Asst. Director of Admin. (CS&T)
Member

Asst. Director (Nursing Services)
Member

Asst. Director (Pharm. Services)
Member

Bar. Akuro R. George
(Legal Adviser; UPTH)
Member

Ven. Prof. W. O. Wotoghe-Weneka
(St. Luke's Anglican Church, Emuoha)
Member

B. J. Thom-Manuel (Mrs.)
(Senior Administrative Officer)
Secretary

UPTH RESEARCH ETHICS COMMITTEE

UPTH/ADM/90/S.II/VOL.XI/813
MICHAEL OTUWURUNNE
School of Health and Medical Science
Seton Hall University
Nutley

25th July, 2019.

ETHICAL APPROVAL

EXPLORING THE RELATIONSHIP BETWEEN EMPLOYEE PERCEPTION OF SERVANT LEADERSHIP STYLE OF SUPERVISORS AND EMPLOYEE SELF-ASSESSMENT OF ENGAGEMENT AND BURNOUT.

We refer to your letter dated 22nd July, 2019 requesting for Ethical Approval of your research project titled "**EXPLORING THE RELATIONSHIP BETWEEN EMPLOYEE PERCEPTION OF SERVANT LEADERSHIP STYLE OF SUPERVISORS AND EMPLOYEE SELF-ASSESSMENT OF ENGAGEMENT AND BURNOUT**".

After a critical appraisal of your proposal by the University of Port Harcourt Teaching Hospital Research Ethics Committee, approval is hereby given to you to commence your study.

Note the following:

1. The study can only be started after it is approved by the examining body.
2. The approved proposal must be presented to your department/unit.
3. We will conduct periodic inspection of your methods to ascertain best practices.
4. At the completion of your study, a copy of the proposal should be submitted to the Hospital.

The Hospital reserves the right to withdraw this approval if at any time during the conduct of the study you infringe on its ethical regulations or the ethical rights of your study subjects.

B.J.Thom-Manuel (Mrs)
Secretary
For: Chairman

Appendix G. Seton Hall University Dissertation Proposal Hearing Proposal



DISSERTATION PROPOSAL HEARING FORM


DOCTORAL CANDIDATE'S NAME: Michael Otuwurunne

PROJECT TITLE: "Exploring the Relationship between Employee Perception of Servant Leadership Style of Supervisor and Employee Self-Assessment of Engagement and Burnout"

PROPOSAL HEARING DATE: November 19, 2019

I HAVE PARTICIPATED IN THE ABOVE-NAMED STUDENT'S PROPOSAL HEARING AND MY SIGNATURE PROVIDES SUPPORT OF THE PROPOSED METHODOLOGY.

DISSERT. COMMITTEE CHAIR: Terrence F. Cahill

COMMITTEE MEMBER SIGNATURE: 

DISSERT. COMMITTEE MEMBER: Deborah A. DeLuca

COMMITTEE MEMBER SIGNATURE: 

DISSERT. COMMITTEE MEMBER: Kathleen Nagle

COMMITTEE MEMBER SIGNATURE: 

School of Health and Medical Sciences
Department of Interprofessional Health Sciences
and Health Administration
Interprofessional Health Sciences Campus (IHSC)
340 Kingsland Street, Building 123, Nutley, NJ 07110

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Appendix H: Informed Consent

Informed Consent

Exploring the Relationship between Employee Perception of Servant Leadership Style of the Supervisor and Employee Self-Assessment of Engagement and Burnout in Nigeria

This study invites registered nurses working in the University of Nigeria Teaching Hospital, University of Port-Harcourt Teaching Hospital or University of Lagos Teaching Hospital to participate.

Participants must be:

- nurses working full-time in one of these three hospitals
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- responsible to a supervisor or under a manager
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Purpose of the Study:

This study will explore if there is a relationship between how a nurse employee views their supervisor/manager as a servant leader and how that nurse employee self-rates themselves regarding work engagement and regarding burnout.

Expected Duration of Participation:

The study surveys will take around 20 minutes to complete.

Voluntary Nature of the Study:

Participation is optional and one can stop participating at any time. No questions will be asked.

Anonymity and Confidentiality:

No personal data will be collected in the study. The answers are kept private. And the study results will be reported as averages or aggregates to further protect anonymity of the data.

To participate in the study:

The principal investigator will be on-site to meet with nurses on Friday 10th of July and on Thursday the 16th of July in nursing lounges on the wards by 2pm

For more details, please contact:

Name: Michael Otuwurunne (Principal Investigator). Email: otuwurmi@shu.edu

Appendix I : Demographic Questionnaire that the Principal Investigator Created

1. Gender

Male	
Female	

2. Name of your workplace

3. Which of the following depicts your working unit?

1	Accidents and emergency		7	Medical Unites: Female		13	Pediatrics	
				Medical Units: male				
2	Burns		8	Neuro Psychiatry		14	Plastic/ Reconstructive Surgery	
3	Care of Elderly		9	Obstetrics and Gynecology		15	Renal	
4	Dental		10	Orthopedic Units		16	Radiology and Dialysis	
5	Ear, Nose and throat		11	Outpatients		17	Surgery	
6	Infectious Control		12	Ophthalmology		18	Others: Please specify	

3. Which of the following can be your age range?

1	18-25	
2	26-30	
3	31-35	
4	36-40	
5	41-45	
6	46-50	
7	51-55	
8	56-60	
9	61-65	

4. Which of these is your years of service?

1	Less than 5 years	
2	6-10	
3	11-55	
4	16-20	
5	21-25	
6	26-30	
7	31-45	
8	46-50	

Which of the following depicts your qualification?

1	Registered Nurse/Midwife		3	Masters	
2	B.Sc.		4	Ph.D.	