UNIVERSITY OF CAPE COAST

EFFECT OF JOB DEMANDS AND WORK ENGAGEMENT ON WORK-LIFE BALANCE AMONG NURSES IN CAPE COAST METROPOLIS

ESTHER DEDE AZZU

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UNIVERSITY OF CAPE COAST

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BY

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Thesis submitted to the Department of Management of the School of Business, College of Humanities and Legal Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy in Public Policy and Management

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature: …… Date: …….

Name: Esther Dede Azzu

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines for supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature…… Date…….

Name: Dr Nick Fobih

ABSTRACT

The present study aimed to examine the effect of job demand on work-life balance (WLB) and the mediating role of work engagement among nurses. The current study relied on simple random sampling to sampled 125 nurses from the Cape Coast metropolis. The statistical tools employed for this study were Statistical Package for Social Sciences (SPSS) version 25 and SmartPLS version 4. The study found a negative relationship between job demand and work life balance. The study also revealed a negative relationship between job demands and work engagements in the Cape Coast metropolis. The results further showed that nurses tend to have a low work-life balance when faced with job demands in the hospital. The results of the present study further confirm the mediating effect of work engagement in the relationship between job demands and work life balance, which suggests that increasing work engagement of nursing professionals will improve their work-life balance. The study recommended nursing managers to enhance a work engagement environment to support WLB of nurses in their facility.

KEYWORDS

Cape Coast Metropolis

Job Demands

Job Demand-Resource Model

Nurses

Work Engagement

Work-life Balance

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DEDICATION

To my children; Danielle, Francine and Johnelle.

TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEYWORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ACRONYMS	xii
CHAPTER ONE: INTRODUCTION	
Background to the study	1
Statement of the Problem	5
Purpose of the Study	7
Research Objective	7
Research Hypothesis	8
Significance of the study	8
Delimitations	9
Limitations of the Study	9
Organisation of the study	9
CHAPTER TWO: LITERATURE REVIEW	
Introduction	10
Theoretical Framework	10
Job demand-resources (JD-R) Model	10

Conceptual Review 15

Conceptual Framework 26

Empirical Review 27

Chapter Summary 33

CHAPTER THREE: RESEARCH METHODS

Introduction 35

Research Paradigm 35

Research Approach 36

Research Design 37

Study Area 38

Population 38

Sampling Procedure 38

Measurement of variables 40

Data Collection Instrument 40

Validity and Reliability 41

Data Collection Procedure 42

Data Processing and Analysis 43

Validity and Reliability of the Model 44

Assessment of Measurement Models 44

Internal Consistency Reliability 44

Convergent validity 45

Discriminant Validity 45

Assessment of the structural model 46

Common Method Bias 47

Ethical Consideration 48

Chapter Summary 48

CHAPTER FOUR: RESULTS AND DISCUSSIONS

Introduction 49

Demographic Characteristics of Respondents 50

Main Study 52

Assessing indicator loadings 53

Assessing Internal Consistency Reliability 53

Assessing convergent validity 54

Assessing discriminant validity 54

Assessing the structural model 56

Assessing coefficient of determination and predictive relevance 57

Examine the effect of Job demand on work-life balance 58

Objective Two 61

Objective Three: 63

Chapter Summary 66

CHAPTER FIVE: SUMMARY CONCLUSION AND RECOMMENDATION

Introduction 67

Overview of the Study 67

Summary of Key Findings 68

Conclusion 69

Recommendation 70

Suggestion for further Studies 71

REFERENCES 72

APPENDICES 100

LIST OF TABLES

Table		Page
1	Reliability Results	42
2	Response Rate	50
3	Demographics of Respondents	52
4	Validity and Reliability	54
5	Fornell Larcker	55
6	Heterotrait - Monotrait Ratio (HTMT)	55
7	Collinearity amongst constructs	56
8	Coefficient of Determination and Predictive relevance	57
9	Structural model results for hypotheses 1 and 2	63
10	Total Effect	64
11	Specific Indirect Effect	65

LIST OF FIGURES

Figure		Page
1	Conceptual Framework	26
2	Structural model for Obj. 1, 2 and 3	60

LIST OF ACRONYMS

AVE	Average variance extracted
AVE	Average Variance Extracted
CORs	Conservative Resource
CR	Composite reliability
DV	Discriminant validity
EWCS	European Working Conditions Survey
HTMT	Heterotrait - Monotrait Ratio
ICT	Information and Communication Technologies
JCQ	Job Content Questionnaire
JD-R	Job-Demand-Resources
OECD	Organisation for Economic Cooperation and Development
PLS	Partial Least Square
QWL	Quality of Work-Life
SEM	Structural equation modelling
SPSS	Statistical Package for Social Science
UCCIRB	University of Cape Coast Institutional Review Board.
WLB	Work-life balance

CHAPTER ONE

INTRODUCTION

The nursing profession is characterized by high levels of stress, demanding work conditions, and significant emotional and physical challenges. These factors are particularly pronounced in regions with limited resources, such as the Cape Coast Metropolis in Ghana. This research aims to investigate the impact of job demands and work engagement on the work-life balance of nurses in this region. Understanding these dynamics is crucial, given the pivotal role that nurses play in healthcare delivery and the potential repercussions of imbalances on both their personal well-being and professional performance.

Background to the study

In today's competitive and fast-paced work environment, coupled with incompatibility between career responsibilities and the home, obligations are high as people attempt to juggle multiple roles, creating an upsurge in work–life. As employees get more involved in their jobs, they are less likely to have time for social activities and family (Asiedu-Appiah, Dufie-Marfo & Frimpong, 2013). On the other hand, when employees spend more time with their families, they are likely to have less time at work, leading to absenteeism and labour turnover among workers (Adams, King & King, 2023). Further, the incompatibility between the demands from the work and non-work domain gives rise to conflict and consequently destabilizes the employee (Allen & Martin 2017).

In this regard, attaining a good WLB for members in an organisation has become a prerequisite for the success of the organisation. Work-life

balance (WLB) is a key factor influencing workers' health and well-being, as demonstrated by its inclusion as an important element in the conceptual ideas of 'attractive work' and 'the good work' (Lunau, Bambra, Eikemo, Van DerWel & Dragano, 2014; Bjärntoft, Hallman, Mathiassen, Larsson & Jahncke, 2020). According to Kalliath and Boroughs (2008), "work-life balance is the individual perception that work and non-work activities are compatible and promote growth by an individual´s current life priorities". Bharathi and Mala (2016), also emphasized that "Work–life balance (WLB) is the ability to experience a sense of control and to stay productive and competitive at work while maintaining a happy, healthy home life with sufficient leisure". Work-Life Balance (WLB) is the proper prioritizing balance between work on one hand and lifestyle goals.

To put it in a different perspective, WLB is about attaining focus and awareness, despite seemingly endless tasks and activities competing for the time and attention of the employees. A balance between work and life should exist when there is proper functioning at work and home with minimum role conflict. As demonstrated by Lyness and Judiesch (2014), WLB has significant ramifications for individuals and organisations all around the globe. In the organisation, WLB practices empower the organisation to hold gifted labourers because of fulfilment with their positions, increment efficiency and productivity (improving administrations to clients) and increment benefit (Hughes & Bozionelos, 2007).

Also, a good WLB can lead to enhancing worker well-being (OECD, 2016), positive job-related attitudes, job satisfaction, organisational commitment (De Menezes & Kelliher, 2011), job performance, and career

development (Sirgy & Lee, 2017). Previous studies have demonstrated that one possible factor causing an organisation's work-life balance is the dramatic increase in information and communication technologies (ICT) (Allvin, Mellner, Movitz & Aronsson, 2013; Hoeven & van Zoonen, 2015). Digitalization has enabled organisations to offer flexible work arrangements that may create opportunities and challenges for workers WLB (Allvin, Aronsson, Hagström, Johansson & Lundberg, 2011). Depending on the organisation, the work tasks, and the needs of the workers, flexible work arrangements can permit: flexibility in time concerning working hours; flexibility in space, referring to opportunities to select more than one working location (e.g., work from home); and flexibility in performance, referring to how the work can be performed (Hill et al., 2015).

Unfortunately, unlike other industries and organisations that may have flexibility in working from home and others, the health sector demands in-person work. The job of healthcare workers is undeniably challenging and demanding in today's context, as highlighted by several studies. Banerjee (2023) further underscores the fierce competition and the need for digital literacy in accessing healthcare industry jobs. Gebbie (2022) adds to this by emphasizing the immense task of ensuring that the public health workforce is prepared to face both identified and emerging challenges. Furthermore, even among healthcare workers, nurses are crucial in providing primary health care services in many rural areas. Nurses must be with patients to administer drugs, check patients' pulses and do other activities that cannot be done virtually. During the covid-19 pandemic, one sector that was overwhelmed and affected most was the health sector of every nation.

The health sector is characterized by high physical and psychological job demands (Navajas-Romero, Ariza-Montes & Hernández-Perlines, 2020). The physical demands of nurse workers reflect the need to work with limited resources, both in terms of personnel and equipment (Harrod et al., 2019), which causes a level of emotional strain that approaches exhaustion (Lemieux-Cumberlege &Taylor, 2019). The nursing sector has the highest rate of nonfatal occupational diseases and injuries, which causes an increase in sick leave. Stress, poor health, and depression negatively affect WLB (Khan, 2020; Daxini & Mehta, 2019). Regarding psychological demands, nurses must make urgent and critical decisions that involve a vital risk for the patient (Lin, Tomasi, Guerguerian & Trbovich, 2019); thus, nursing professionals are continuously exposed to traumatic events (Fukumori, Miyazaki, Takaba, Taniguchi & Asai, 2020).

Ultimately, a poor WLB of these nurses may lead to adverse health-related outcomes, such as self-reported sickness absence (Antai, Oke, Braithwaite & Anthony, 2015), job- and life dissatisfaction, job burnout, depression, irritability, fatigue, increased blood pressure and cholesterol levels (Sirgy & Lee, 2017). In a study in Malaysia, Aazami et al. (2015) indicated that inter-role conflict in work and life steers employees toward frequent use of maladaptive coping strategies, which leads to psychological distress. Tsai et al. (2016) reported that 351 (14.5%) of surveyed nurse physicians said strong intentions to leave their current hospital due to work demands. These and many other reasons have compelled further development of nurses' work-life balance needs (Greenhaus & Allen 2011; Kossek, Baltes & Matthews 2011).

Research in multiple works of literature supports the importance of work engagement in promoting positive employee outcomes (Vera et al., 2016; Osei et al., 2022). According to Vera et al. (2016), work engagement is an important resource to help individuals accomplish their preferred level of WLB. Carvalho and Chambel (2014), also found that work engagement increases WLB, as having discretion over how the job is performed can help employees develop additional skills instrumental in experiencing the greater family performance. Work engagement is the work-related state of mind characterised by vigour, dedication and absorption (Schaufeli et al., 2002; Osei et al., 2022).

Based on the Job-Demand Resources Model, job demand and work engagement are classified as job demands and resources respectively (Bakker & Demerouti, 2014; Haar et., 2018; Bjärntoft et al., 2020). These two domains create two independent processes; one that is energy-driven and one that is motivation-driven. The interaction of these two domains influences WLB. This study, therefore, examines the effect of Job demand and the mediating effect of work engagement on the work-life balance of nurses in the cape coast metropolis.

Statement of the Problem

The nursing profession is inherently demanding, with high expectations placed on nurses to provide quality patient care, often under challenging conditions. This dynamic is particularly evident in the Cape Coast Metropolis, where nurses face significant job demands. These demands include long working hours, emotional stress from patient care, and the physical strain of the job. Undoubtedly, nursing professionals carry out work

of special interest to society, given the leading role of the health system in the welfare of any nation. Despite this, the work of nurses is characterized by high job demands: direct contact with patients, exhausting workdays, and night shifts (Henson, 2019). Nurses in Ghana play a critical role in the healthcare system, yet they often experience substantial job demands that can lead to burnout and negatively impact their work-life balance.

Ghana has a population of about 40 million and a life expectancy of 56 years for males and 58 years for females (Ghana Statistical Service [GSS], 2022). The nurse-to-population ratio in Ghana is 1:839, which is better than the World Health Organization's (WHO) recommended ratio of 1:1000 (GhanaWeb) (GBC Ghana Online). Despite this favorable ratio, the healthcare sector is strained due to the high workload and the increasing exodus of nurses seeking better opportunities abroad. In the first quarter of 2022 alone, over 3,000 nurses left Ghana, exacerbating the staffing challenges in hospitals and clinics (GBC Ghana Online).The average Ghanaian nurse undergoes much stress and is likely to have an unbalanced work-life balance (Hanan, 2017; Shabir, 2019).

Unlike other professionals, nurses offer an intangible service that is inextricably linked with the professional who performs it. Good management of work–family conflicts will improve the WLB of these professionals, which will translate into positive effects for the worker and the organisation (Cheng, 2019). Most organisations are specific on WLB practices by offering different bundles of resources in light of a legitimate concern for their employees (Shukla & Bhandari, 2014; Bharathi & Mala, 2016). Hence, it is necessary to recognize how nurses balance their professional and domestic lives.

Drawing inspiration from the J-DR model the interactions between job demands and resources have been previously examined in the field of psychological wellbeing (Karasek, 1979; Hobfoll, 1989; Karasek & Theorell 1990) suggest that the combination of high job demands and a great deal of work engagement can help reduced work–life balance (Russo, Shteigman & Carmeli, 2016). Additionally, various studies suggest that work engagement contributes decisively to improving WLB (Osei et al., 2022; Khan et al., 2019). Aligned with the studies mentioned above, this study suggests that the interaction between demands and resources is critical in influencing individuals' perception of WLB rather than the demands and resources per se. This study, therefore, fills this gap by exploring the impact of job demand (physical and psychological demand) on the work-life balance among nurses in the Cape Coast metropolis. And the role of work engagement in the relationship between job demand and work-life balance.

Purpose of the Study

The purpose of the study is to examine the extent to which job demand is associated with work-life balance (WLB) and the mediating role of work engagement among nurses.

Research Objective

1. Examine the effect of Job demands on the work-life balance of nurses in the Cape Coast Metropolis.
2. Assess the effect of Job demands on nurses' work engagement in the Cape Coast Metropolis.

3. Assess the mediating effect of work engagement in the relationship between job demands and work-life balance of nurses in the Cape Coast Metropolis.

Research Hypothesis

H1: Job demand has a significant negative influence on the WLB of nurses in the Cape Coast metropolis

H2: Job demand has a significant negative influence on the Work engagement of nurses in the Cape Coast metropolis

H3: Work engagement mediates the relationship between job demands and WLB of nurses in the Cape Coast metropolis.

Significance of the study

This study enriches the existing body of literature on occupational health and psychology by focusing on a developing country context, specifically Ghana. While much research has been conducted in more developed regions, there is a scarcity of studies addressing the unique challenges faced by nurses in resource-limited settings. The insights gained from this research can guide healthcare administrators and policymakers in the Cape Coast Metropolis and beyond in making informed decisions to improve the work environment for nurses. Nurses' well-being is directly linked to their job satisfaction and overall mental health. By identifying factors that influence work-life balance, this study can help develop initiatives aimed at reducing burnout and increasing job satisfaction. Programs that promote work engagement and provide adequate support for managing job demands can lead to a healthier, more satisfied nursing workforce. This, in turn, can reduce absenteeism and turnover rates, contributing to a more stable and efficient healthcare system.

Delimitations

The current study was confined to nurses in the cape coast metropolis. The study examines the effect of job demand on work-life balance among nurses in some selected Cape Coast hospitals. The study uses the Cape Coast Teaching Hospital and Ankaful government hospital. The study addresses a comprehensive selection of factors of relevance to job demands.

Limitations of the Study

Although our study makes some theoretical contributions, it has some limitations. As is often the case in empirical research conducted in social sciences, the results should be interpreted cautiously. First, a causal relationship between variables cannot be established since this study is cross-sectional. Again, no control variables have been introduced, despite being a highly feminized profession. Therefore, it would not be prudent to generalize these assumptions and ideas to other work environments.

Organisation of the study

The study is organised into five chapters. Chapter one constitutes the introduction, focusing mainly on the study's background, problem statement, objectives and organisation. Following the introductory chapter, Chapter two reviews the theoretical and empirical literature about the concerns of the thesis. Chapter three provides information on the methodology used in the research, population, sample, and analysis tools used in the study. In Chapter four, the result of the study is presented and discussed. Chapter five also summarises the significant findings, conclusion, implications and suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The literature review section of this study provides a comprehensive examination of existing research and theoretical frameworks relevant to the effects of job demands and work engagement on work-life balance, with a particular focus on the nursing profession. The objective of this section is to situate the current study within the broader academic discourse, identifying key concepts, prevailing theories, and significant findings that inform our understanding of the complex interplay between these variables. The first part of the present study is grounded in a theoretical framework, of the Job Demands-Resources (JD-R) model, which explains the potential association between negative and positive antecedents of WLB. The second section focuses on the conceptual framework and the third section examines the empirical review followed by the chapter summary.

Theoretical Framework

Job demand-resources (JD-R) Model

The Job Demands-Resources (JD-R) model, introduced by Demerouti, Bakker, Nachreiner, and Schaufeli in 2001, has been widely applied and studied in the field of organizational psychology. It posits that job demands and resources have unique and interactive effects on employee well-being and performance (Bakker, 2014). Job demands refer to those physical, psychological, social, or organisational aspects of the job that require sustained physical or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and psychological

costs (Bakker & Demerouti, 2007, 2014). Job demands, such as workload and time pressure, can lead to stress and burnout, while job resources, such as autonomy and social support, can buffer the negative effects of these demands and promote work engagement (Giauque, 2022).

On the other hand, Job resources refer to those physical, psychological, social, or organisational aspects of the job that are either functional in achieving work goals, reduce job demands and the associated physiological and psychological costs or stimulate personal growth, learning, and development (Bakker & Demerouti, 2007, 2014). Job resources, such as autonomy and social support, can buffer the negative impact of job demands, such as workload and time pressure, on employee burnout (Bakker, 2017).

The JD-R model is a well-established theoretical model in which some occupational and individual factors associated with the nursing profession are classified as job demands (Physical and Psychological demands). (Bakker & Demerouti, 2007; Bakker & Demerouti, 2014). The model has been further developed into JD-R theory, which emphasizes the role of personal resources and the potential for reversed causal effects, where engaged workers mobilize their own resources to stay engaged (Bakker, 2017). The model has also been used to explore the impact of job-related resources on job pressure, with findings supporting the role of resources in reducing pressure (Schieman, 2013).

The Job Demands-Resources (JD-R) model, which posits that work engagement is influenced by job demands and resources, has been explored in various contexts. Factors such as work engagement also sees as resources. This process can also interact in predicting well-being, for example, by

resources mediating a negative association between job demands and WLB or work engagement mediating the negative association between job demands and WLB (Bakker & Demerouti, 2014). Borst (2017) found that work and personal resources, such as public service motivation, positively impact work engagement, which in turn affects job outcomes. Braine (2011) further supported this, showing that the JD-R model predicts work-based identity and dedication, with job resources being a strong predictor. Priyono (2022) extended this by demonstrating the mediating role of work engagement in the relationship between job demands/resources and organizational commitment. However, Brough (2013) found mixed results in a cross-national study, with job resources having a significant impact on work engagement but minimal evidence for the strain hypothesis. These studies collectively highlight the importance of job resources in enhancing work engagement and its subsequent impact on organizational outcomes.

Furthermore, career competencies, which are personal resources, play a mediating role in the relationship between job resources and work engagement, suggesting that they are important for employee well-being (Akkermans, 2013). Recently, the J-DR model has been used in the context of WLB (Valcour, 2007; Haar, Sune, Russo & Ollier-Malaterre, 2019). Job demands to capture an individual's overall perceptions of how demanding the work role responsibilities are (Boyar, Carr, Mosley & Carson 2007). Work demands are viewed as a perceptual construct that accounts for an individual's overall consideration of his or her work role responsibilities. Work demands include pressures from the individual (e.g., the desire or motivation to accomplish specified work or personal goals) and the occupation (e.g.,

assigned level of role responsibility). Job demands exhaust employees of their mental and physical resources, leading to a deterioration of their psychological or physiological health.

Resources are structural or psychological assets that may facilitate role functioning, enhance performance, and generate additional resources (Voydanoff, 2004). Brummelhuis and Bakker (2012), argue that individual and contextual resources might help individuals experience better work and non-work outcomes as they can address the specific role demands. Job resources play an extrinsic motivational role by helping individuals achieve their work goals or an intrinsic motivational role by fostering employees' growth, learning and development, leading to high work engagement or job performance. Work engagement has been identified as important resource that can shape an individual's capacity to achieve proper balance in terms of work.

Previous research has testified that indeed, work engagement is an important contextual resource that can help individuals constructively address the challenges faced in their organisation (ten Brummelhuis & Bakker 2012; Carvalho & Chambel 2014; Russo, Buonocore, Carmeli & Guo 2015). Grönlund (2007), found that the interplay between work engagement and job demands moderates employees' psychological well-being and work-family conflict. Karasek et al. (1998), argued that the highest level of psychological strain occurs when job demands are high and work engagement is low, whereas active coping behaviours are likely to occur under high job demands and high work engagement (Karasek et al. 1998). This means that high job demands and limited job resources tend to increase strain on workers, which can lead to reduced WLB, whereas a good WLB can be achieved despite high

job demands if the individual receives sufficient job resources (Voydano, 2005). Therefore, we propose that work engagement mediate the relationship between job demand and nurses' work-life balance.

The Job Demand Resources model, as explored by Jiang (2020), emphasizes the role of resources in reducing job insecurity. This is a strength of the model, as it highlights the importance of positive factors in the workplace. However, Elsby (2021) and Ravn (2013) both point out potential weaknesses. Elsby's model of firm dynamics with on-the-job search suggests that the model may not fully capture the complexities of labor market fluctuations. Ravn's study on job uncertainty and deep recessions also raises questions about the model's ability to account for the impact of macroeconomic factors. Additionally, Grossman (1973) critiques the model's explanation of the relationship between aggregate demand and employment, suggesting that it may not fully capture the dynamics of the labor market. These critiques highlight the need for further refinement and development of the Job Demand Resources model.

Nonetheless, the JD-R Model provides a comprehensive framework that integrates both job demands and job resources, which is valuable when studying a complex work environment like nursing. Numerous studies in the field of occupational psychology and nursing have provided empirical support for the JD-R Model's predictions. For instance, a study by Bakker and Demerouti (2007) found that job resources, such as supervisor support, significantly predicted work engagement among nurses. The JD-R Model has practical implications for interventions. It suggests that reducing excessive job demands and enhancing job resources can improve work engagement and

work-life balance. This aligns with practical recommendations for managing nurse workloads and providing support (Bakker & Demerouti, 2007).

Conceptual Review

Work engagement

The concept of work engagement, defined as a positive, fulfilling, and affective-motivational state of work-related well-being, has been extensively studied. Work engagement is a positive, fulfilling, work-related state of mind. It is characterized by vigor, dedication, and absorption (Shimazu, 2010; Bakker, 2008). According to Schaufeli et al. (2002), vigour is the high level of energy and mental resilience at work; dedication is the sense of enthusiasm, inspiration and pride in one's work, and absorption is highly concentrated, happily engrossed in work.

Bakker et al. (2014), argued that a given person might display fluctuations (e.g. engagement or disengagement) in his/her daily work experience. Engaged employees are highly energetic and strongly identify with their work (Bakker, 2008). Job and personal resources, such as autonomy, supervisory coaching, and self-efficacy, are the best predictors of work engagement (Shimazu, 2010; Bakker, 2008). This state is associated with positive outcomes, including psychological and physical health, proactive organizational behavior, and job performance (Shimazu, 2010; Bakker, 2008). However, there is still much to learn about work engagement, and further research is needed to fully understand this concept (Bakker, 2008).

A range of studies underscore the significance of work engagement in organizational success. Ramya (2016) emphasizes the role of engaged employees in driving business profits, while Shimazu (2010) highlights the

positive impact of work engagement on job performance and organizational effectiveness. Fletcher (2016) further underscores the importance of work engagement in promoting high performance and wellbeing, particularly in challenging times. Mujiasih (2012) adds that transformational leadership and organizational culture are key factors in enhancing work engagement, which in turn contributes to employee retention, customer satisfaction, and optimal performance.

Job resources, such as skill variety, task significance, task identity, employee autonomy, advancement, role clarity, and organizational support, have been consistently linked to work engagement (Bon, 2017; Siddiqi, 2014; Bakker, 2011). These resources not only directly influence work engagement but also indirectly impact customer satisfaction, making them crucial for service marketing (Siddiqi, 2014). Engaged employees are more productive, open to new information, and willing to go the extra mile, and they actively seek to maintain their engagement (Bakker, 2011).

Prior research conceptualized work engagement as a relatively stable individual difference construct (Rich et al., 2010). Although numerous studies have taken a relatively stable view when examining work engagement (Gupta et al., 2017; Lam et al., 2016; Matta et al., 2015; Schmitt et al., 2016). In addition, some researchers (Sonnentag et al., 2010; Xanthopoulou and Bakker, 2012), have pointed out that at least one-third of the total variance of work engagement is within-person variance. Thus, engagement not only varies at the between-person level (e.g. trait-like variable) but also fluctuates at the within-person level (e.g. state-like variable). As defined by Kahn (1990), work engagement refers to "the simultaneous employment and expression of a

person's "preferred self" in task behaviours that promote connections to work and to others, personal presence (physical, cognitive, and emotional) and active, full performances" (Kahn, 1990). Barnes et al. (2015) found that job demand in the form of leaders' abusive behaviour impairs daily work unit engagement.

The Utrecht Work Engagement Scale is a widely used instrument to measure work engagement (Shimazu, 2010). Ababneh (2019) further expands on the concept, proposing additional dimensions such as goal-identification, task performance, positive emotions, persistence, and discretionary effort. Attridge (2009) emphasizes the importance of workplace practices in improving work engagement, and provides practical recommendations for fostering an engaging climate.

Job demand

Demands are physical or psychological claims associated with role requirements, expectations and norms to which individuals must respond or adapt by exerting physical or mental effort (Voydanoff, 2004; Navajas-Romero, Ariza-Montes & Hernández-Perlines,2020). Research on job demand has highlighted the impact of changing work conditions on employees' well-being (Kubicek, 2017). This is further complicated by the role of taxes and benefits in labor demand (Clancy, 2009), and the need to redefine labor market analysis to focus on the demand for jobs (Bell, 1981). The relationship between labor demand and job-to-job movement has also been explored, with a focus on the role of employment regime and hiring and firing costs (Hassink, 1996).

Excessive job demands can lead to work outside of regular working hours, which may reduce time and energy for private activities outside of work, leading to poor WLB (Kinman & Jones, 2018). In addition to job demands, prior research has also shown that the number of hours worked per week and the frequency of overtime work can influence an individual's role functioning (Laurijssen and Glorieux 2013; Sturges and Guest 2004; Valcour 2007).Extensive research has shown factors related to work content, work characteristics, work demands, the number of hours worked per week, and overtime hours worked per week. Work organisation and social relations are important for individual mental wellbeing (Cerdas, Härenstam, Johansson & Nyberg, 2013; Theorell, 2015; Lindberg & Vingård, 2012). Many studies have shown that Poor psychosocial working conditions, including high job demands, time pressures and availability expectations, have been shown to adversely affect WLB (Mellner, Aronsson & Kecklund, 2014).

A range of studies have identified key job demands and resources for nurses. Broetje (2020) found that work overload, lack of formal rewards, and work-life interference are significant demands, while supervisor support, fair management, and transformational leadership are important resources. Tahir (2018) further highlighted the high levels of physical and mental demands, and the need for increased autonomy and performance feedback. Llewelyn (1987) emphasized the need for improved training to address these demands, particularly in stress management and communication. Al-Homayan (2013) focused on the negative impact of job demands on nurses' performance, suggesting a need for further research in this area.

Job demands of nurses are influenced by a variety of factors. Bai (2019) highlights patient-care demands, professional issues, work environment, and personal and family-related issues as key stressors. Bani-Hani (2016) further emphasizes the negative consequences of job demands, including poor quality of care, burnout, and job dissatisfaction. Maqbali (2015) underscores the importance of job satisfaction in nurse retention and high-quality care, and identifies factors such as workload, work environment, and professional relationships as key influencers. These studies collectively underscore the multifaceted nature of job demands for nurses, and the need for effective coping strategies and support systems to mitigate their impact.

Research consistently shows that job demands and job control significantly impact the work-life balance of nurses (Ng, 2017; Navajas-Romero, 2020). High job demands, particularly physical demands, can lead to work-life imbalance (Navajas-Romero, 2020), while job control can have both positive and negative effects (Ng, 2017). Nurses' perception of job demand is negatively correlated with their satisfaction with work-family balance (Ahmed, 2014). To address these issues, flexible work practices, team-based management, and reasonable workloads are recommended (Ng, 2017; Ahmed, 2014). Further research is needed to explore the impact of organizational policies, work environment, and personal factors on work-life balance (Yaseen.2023).

A range of studies have explored measures for job demand for nurses. Knudsen (2018) found that it is feasible to collect data on various work demands, including shiftwork, organization, and stressors, to identify opportunities for system redesign. Magnago (2010) highlighted the need to

reduce psychological demands and increase worker autonomy. Penz (2018) developed and tested the Job Demands in Nursing (JDIN) Scale and the Job Resources in Nursing (JRIN) Scale, providing specific tools for measuring these demands. Al-Homayan (2013) emphasized the potential negative impacts of job demands on nurses' performance, suggesting a need for further research in this area.

Work-life balance

The concept of work-life balance for nurses is a complex issue, influenced by factors such as working hours, work pressure, and workplace culture (Omar, 2021). Achieving this balance is crucial for nurses' physical, emotional, and spiritual health (Simmons, 2012). However, it can be challenging due to the demands of the profession, potentially leading to mental health issues (Suguna, 2017). The quality of nursing care is directly linked to nurses' work-life balance and job satisfaction (Oka, 2017). These studies highlight the need for further research and the development of strategies to support nurses in achieving work-life balance.

Nurses face significant challenges in achieving work-life balance, with factors such as workload, job requirements, and supervisor support influencing this balance (Nurumal, 2017). The emotional and physical toll of these challenges can be significant, with nurses often prioritizing the needs of others over their own (Mullen, 2015). This can lead to a complex and conflicting situation, particularly for nurses who are also parents (Kim, 2019). Despite these challenges, it is crucial for nurses to strive for work-life balance to maintain their physical, emotional, and spiritual health (Simmons, 2012).

Work-life balance policies are found to be one of the basic needs for every working adult, especially in this era. Individuals are now exposed to the idea of work-life balance to achieve total life satisfaction, apart from being happy or performing well at work. Work-life balance is an employee's time at work, socialising with family and friends, and attending to other personal interests (Smith, 2010). In other words, it reflects how people do or ought to satisfy their business-related and individual obligations in such a technique. Accordingly, work-life balance is an employee's time-sharing ratio between work and family. WLB is said to be achieved when there is a harmony (not conflict) between work and life (Lawson et al., 2013; Semlali and Hassi, 2016). Work includes all the activities an employee performs in organisations, whereas life comprises all the activities unrelated to work, including household chores, childcare, adult care and care of old-age parents and relations.

Many studies have found a positive relationship between work-life balance and employee performance. From that perspective, they clarified that when employees can balance their work and other activities, they can make a big contribution to their organisations, influencing their job performance. The role of employees in establishing a work-life balance is well-established in the literature (Rotondo & Kincaid, 2008). Individual employees (individual factors) or employers (occupational factors) have different options to determine the balance, for instance, flexible hours schemes to compensate for extra work. It is contended that employees are healthy and contribute to organisations by working long hours when there is a work-life balance (Joo & Lee, 2017; Nielsen et al., 2008).

Research consistently shows that job demands, particularly psychological demands, have a negative impact on the work-life balance of nurses (Ng, 2017; Navajas-Romero, 2020; Ahmed, 2014). However, job control can mitigate this effect, with flexible work practices and team-based management being suggested as potential solutions (Ng, 2017). Physical demands also play a role, with supervisor support being a key factor in managing these demands (Navajas-Romero, 2020). Nurses' perception of job demand is significantly related to their satisfaction with work-family balance, highlighting the need for hospital management to address this issue (Ahmed, 2014).

A range of studies have explored the relationship between job demands, work engagement, and work-life balance for nurses. Ng (2017) found that reducing job demands and maintaining job control are crucial for achieving work-life balance. Bjarnadottir (2011) highlighted the importance of resilience and adaptability in maintaining work engagement, particularly in relationally demanding roles. Ghazawy (2019) identified workplace factors, such as motives, incentives, and autonomy, as significant predictors of work engagement, which in turn influenced job performance and turnover intention. Patience (2020) further emphasized the role of job resources, particularly meaningful work, in predicting work engagement among nurses in both public and private hospitals. These findings collectively underscore the need for a supportive work environment and the availability of resources to enhance work engagement and work-life balance for nurses.

A range of studies have explored the concept of work-life balance and its measurement. Brough (2014) and Haar (2013) both developed and

validated new measures of work-life balance, with Brough's measure showing negative associations with work demands and positive associations with family and job satisfaction. Haar's measure, on the other hand, was found to be distinct from other work-life dimensions and to have a significant indirect mediation effect between work-life conflict and enrichment. Fisher (2004) used time diaries to study work-life balance, finding that it can be achieved when peak periods of different activities do not overlap substantially. Finally, Simmons (2012) emphasized the importance of work-life balance for nurses, providing tips for achieving it.

Job Demand and Work life balance

A range of studies have highlighted the significant impact of job demands on work-life balance. Ross (2014) and Shiels (2009) both emphasize the negative effects of increased working hours and time demands on work-life balance, with the latter also noting the influence of preferred working hours. Gounder (2018) further underscores the importance of work-life balance in moderating job satisfaction, particularly in call center organizations. Hill (2001) adds to this by highlighting the positive influence of perceived job flexibility on work-family balance. These studies collectively suggest that job demands, particularly in terms of working hours and flexibility, play a crucial role in shaping work-life balance.

Research consistently shows that job demands, particularly psychological demands, have a negative impact on the work-life balance of nurses (Ng, 2017; Navajas-Romero, 2020; Ahmed, 2014). This is further exacerbated by a lack of job control, which can lead to increased work interference with personal life and vice versa (Ng, 2017). However, the

relationship between job demands and work-life balance is moderated by job control and supervisor support, with the latter being particularly important in managing physical demands (Navajas-Romero, 2020). Nurses' perception of job demand is also significantly related to their satisfaction with work-family balance (Ahmed, 2014). Therefore, it is crucial for nursing management to implement strategies that reduce job demands, increase job control, and provide adequate support to improve the work-life balance of nurses.

Job Demand and Work engagement

Research on the impact of job demands on work engagement has yielded mixed results. Mauno (2007) found that job resources, particularly job control and organization-based self-esteem, were better predictors of work engagement than job demands. This was supported by Kühnel (2012), who found that day-specific resources, such as psychological climate and job control, promoted work engagement. However, Silitonga (2020) reported a negative, insignificant link between work engagement and workload, suggesting that job demands may not always have a significant impact. Lee (2017) further complicated the picture by showing that job demands and resources can influence job crafting, which in turn affects work engagement. These findings suggest that the relationship between job demands and work engagement is complex and may be influenced by a range of factors.

A range of studies have explored the impact of job demands on work engagement among nurses. Gabel-Shemueli (2015) found that job resources, such as social support and autonomy, can buffer the negative effects of job demands on work engagement. Montgomery (2015) further supported this, showing that teamwork at the department level can enhance work

engagement. Bjarnadottir (2011) highlighted the role of resilience, professional development, and meaningful work in maintaining work engagement among nurses. Finally, García-Sierra (2016) emphasized the moderating role of work engagement in the relationship between job demands and burnout, suggesting that enhancing work engagement can help combat burnout.

Job Demand, work engagement and work life balance

Research has shown that job demands can have a significant impact on work-life balance, with work engagement playing a mediating role in this relationship (Balogun, 2019; Jaharuddin, 2019; Vîrgă, 2015). Balogun (2019) found that high job demands can exacerbate the negative effects of work engagement on work-family conflict, while job resources can mitigate these effects. Similarly, Vîrgă (2015) demonstrated that work-life imbalance can undermine the positive relationship between self-efficacy and work engagement. However, Jaharuddin (2019) did not find a mediating effect of work engagement between work-life balance and turnover intention. Salanova (2008) further highlighted the mediating role of work engagement in the relationship between job resources and proactive behavior. These findings underscore the complex interplay between job demands, work-life balance, and work engagement.

The relationship between job demands and work-life balance for nurses is complex and multifaceted. Morales-García (2024) and Ng (2017) both highlight the significant impact of job demands on work-life balance, with the former emphasizing the mediating role of work engagement. Lee (2023) further underscores the importance of work-life balance, showing its

positive effect on job engagement and performance. However, Idulfilastri (2021) suggests that the influence of work-life balance on work engagement may be weak, indicating a need for further research in this area.

Conceptual Framework

The dependent variable in this study is "Work-Life Balance among Nurses." The independent variables is "Job Demands" and "Work Engagement." serves as the mediating variable. This suggests that changes in job demands directly affect work-life balance among nurses. In the diagram, use an arrow pointing from "Job Demands" to "Work-Life Balance" to indicate this causal relationship. Consistently, the study hypothesizes that job resources (work engagement) mediate the relationships between job demands and WLB. Being in a situation where resources exceed role demands may increase the employees' capacity to achieve WLB. Therefore, the study hypothesizes that work engagement will mediate the relationships between demands and WLB.

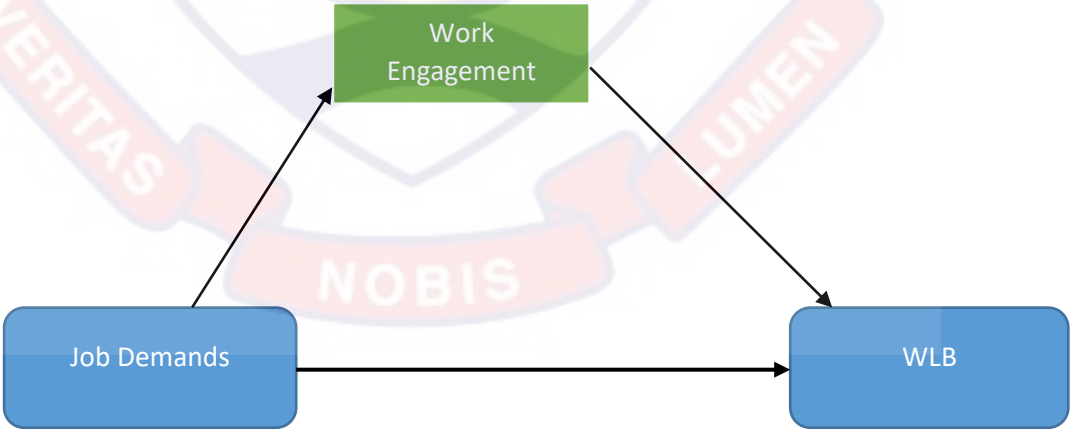

Figure 1: Conceptual Framework
Source: Author's construction, Azzu (2023)

Empirical Review

A review of nursing staff job demands and resources identified work overload, lack of formal rewards, and work-life interference as key demands, and supervisor support, fair management, and transformational leadership as key resources (Broetje, 2020). This is particularly relevant for female nurses, who often struggle to achieve work-life balance due to multiple responsibilities at work and home (Lakshmi, 2012). The lack of robust research designs and overemphasis on job satisfaction were highlighted in a review of work-related psychological states of nurse practitioners and physician assistants (Hoff, 2019). Finally, a systematic review on work engagement in professional nursing practice found a wide range of antecedents related to work engagement, including job demands and resources (Keyko, 2016).

A range of factors influence work engagement in nursing, including organizational climate, job resources, and personal resources (Keyko, 2016). Nurse managers play a crucial role in promoting work engagement, with relational leadership behaviors being particularly effective (Alluhaybi, 2023). Work engagement is positively related to job satisfaction, with the strength of this relationship influenced by data collection method and the presence of control variables (Yıldız, 2022). These findings underscore the importance of creating a supportive work environment and effective leadership in promoting work engagement among nurses.

A review of the literature on work engagement in nursing reveals several key factors. García-Sierra (2016) emphasizes the role of nurse managers in promoting engagement, while Palmer (2011) highlights the

positive correlation between existential fulfillment and work engagement. Yıldız (2022) further underscores the relationship between work engagement and job satisfaction, with the presence of control variables and data collection methods as significant moderators. Simpson (2009) suggests that organizational factors play a significant role in work engagement, and calls for a consistent definition and measurement of this construct. These findings collectively underscore the importance of both individual and organizational factors in promoting work engagement among nurses.

Also, Bharathi and Mala (2016) identify certain factors that strongly impact the work–life balance (WLB) of women employees in information technology (IT) companies in India. Based on an extensive literature review, 42 factors relating to WLB are grouped into five constructs: professional challenges, personal challenges, SM involvement, professional enhancers and personal enhancers. Exploratory factor analysis was used to extract the highly impacting factors. The study found that irrespective of challenges or enhancers, personal factors are perceived to be more impacting than professional ones.

Nizam (2018), researched the determinants of work-life balance (WLB) in the Event Industry of Malaysia. The research discovered the impact of these variables (working hours, workload, leave policies, work arrangements and reward schemes) on WLB. The study adopts an explanatory research design, and primary data was collected through survey questionnaires measured with five (5) point Likert-Scale. A total sample of 303 was collected using a simple random sampling method. The research found that Working Hours (WH), Workload (WL), Work Arrangements (WA) and Reward

Schemes (RS) have a significant impact on the Work-Life Balance among Event Industry professionals.

In a related study, Haar, Sune and Russo (2018), drawing on the perceived work-family fit and balance perspective, investigated demands and resources as antecedents of work-life balance (WLB) across four countries (New Zealand, France, Italy and Spain). Using structural equation modelling analysis on a sample of 870 full-time employees, the results demonstrated that work demands, hours worked and family demands were negatively related to WLB, while work engagement and supervisor support were positively related to WLB. Furthermore, the study identified additional predictors of WLB that were unique to some national contexts. For example, in France and Italy, overtime hours were negatively associated with WLB, while parental status was positively associated with WLB.

Ricardiantoa, Bramulya, Setiawatia and Gugata (2019) analyzed leadership style, work-life balance, and employee engagement in the ship crew's work effectiveness of 290 ship crews. The study uses a quantitative approach with Structural Equation Modeling with the help of the Lisrel program. The result of the study shows that leadership style, work-life balance and employee engagement directly and positively influence work effectiveness. Haar, Brougham and Roche (2017) further test servant leadership towards the three dimensions of work engagement: vigour, dedication and absorption. In addition, their study tests the role of work-life balance as a potential mediator to test whether servant leadership builds work-life balance, which ultimately leads to higher work engagement. Overall, the study strongly supported servant leadership predicting work-life balance and

the three work engagement dimensions. Also, the influence of servant leadership is fully mediated by work-life balance.

In a related study, Bjärntoft et al. (2020), through a cross-sectional survey, examined the extent to which occupational factors (organisational, leadership and psychosocial) and individual work-related behaviours (over-commitment, overtime work and boundary management) are associated with WLB, and whether these associations are modified by the perceived level of flexibility at work (i.e., control over when, where, and how to do the work). In total, 2960 full-time office workers with flexible work arrangements at the Swedish Transport Administration participated in the study. Using linear regression analyses with adjustment for covariates, the strongest negative associations with WLB were found for over-commitment, expectations of availability, and overtime work. The strongest positive associations were found for boundary management, information about organizing work, social support, and relation-oriented leadership. The study further suggested that WLB can be promoted by organisational initiatives focusing on minimizing excessive job demands, increasing psychosocial resources, supporting boundary management, and enhancing perceived flexibility.

Yom and Hee (2013), examined burnout and job satisfaction among nurses based on Job Demand-Resource Model. A survey using structured questionnaire was conducted with 464 hospital nurses. Data analysis was done using SPSS Win 17.0 for descriptive statistics and AMOS 18.0 for the structural equation model. The results revealed that Workload directly affected emotional exhaustion, whereas supervisor support directly affected emotional exhaustion depersonalization and low personal accomplishment

significantly affected job satisfaction. The results suggest that nurses' workload should be decreased and the supervisor's support should be increased to retain nurses. Kyei and Oteng (2019), investigated how female teachers in Ghana can balance their careers and social roles while acting as role models in career progression. Study respondents indicated their perceptions of significant sociocultural challenges in balancing domestic roles and teaching. Some support systems were identified but were not found to significantly affect female teachers' resilience and determination to consolidate their careers in GES.

Tetteh and Attiogbe (2018), explored how working university students in Ghana can combine work and study and the effect of this on their academic performance. An exploratory survey method is used to collect data from 360 working students randomly selected from four universities in Accra, Ghana. The study employs the Pearson product-moment correlation coefficient (r^2) to test two hypotheses, and the results affirm both. It is found that combining schooling with work results in less time for studies which negatively affects academic performance. Again, difficulty finding time for studies due to work requirements ranks the highest, and finally, students receive slightly better support from their academic institutions than from their employers. The findings imply that to achieve sustainable development in the tertiary education sector and industry, all stakeholders – universities, policymakers, employers, students, etc.

Abdirahman, Najeemdeen, Abidemi and Ahmad (2018), examined the relationship between work-life balance, job satisfaction and organisational commitment to employee performance among administrative staff in Northern

region universities in Malaysia. The study adopts the quantitative research method of the primary source utilized to collect the data from two hundred and seventy-one administrative staff respondents using probability sampling technique and data collected and analysed using Statistical Package for Social Science (SPSS). The regression results indicated that all independent variables, work-life balance, job satisfaction and organisational commitment, positively correlate with the dependent variable, employee performance. However, the study concludes that for effective employee performance to be enhanced, the level of motivation needs to be improved.

Soomro, Breitenecker and Shah (2017), explored the relationships between work-life balance, work-family conflict, and family-work conflict and perceived employee performance, with job satisfaction as a moderating variable. Responses from 280 young university teaching faculty serving in public-sector universities in Islamabad, Pakistan, were investigated using linear regression analysis to test six hypotheses. The results show that work-life balance and work-family conflict positively affect employee performance. Job satisfaction moderates the relationships between work-life balance, work-family conflict, and family-work conflict with perceived employee performance. The study presents some impressive results, which are different from previous studies, such as work-family conflict having a significant positive effect on employee performance, the family-work conflict having no significant effect on employee performance, and job satisfaction can be a negative moderator between these relations.

Aruldoss, Kowalski and Parayitam (2020), investigated the relationship between quality of work-life (QWL) and work-life balance

(WLB). This paper gathered data from 445 respondents in a cosmopolitan city in southern India using a structured survey instrument. First psychometric properties of the instrument were tested, and then hierarchical regression was used as a statistical technique for analyzing the data. The hierarchical regression results indicated that QWL is (1) negatively related to job stress, (2) positively related to job satisfaction and (3) positively related to job commitment. The results also indicated that (1) job stress is negatively related to WLB, (2) job satisfaction is positively related to WLB, and (3) job commitment is positively related to WLB. The results also show partial mediation of job stress, satisfaction, and commitment in the relationship between QWL and WLB.

Hasan and Teng (2017), examine the relationship between work-life balance and job satisfaction among working adults in Malaysia, with gender and race as moderators. One hundred twenty respondents completed the questionnaire. Statistical Package for Social Science (SPSS) version 22 was used. Reliability, one-way analysis of covariance (ANCOVA), t-test and one-way analysis of variance (ANOVA) were tested in this study. Based on the results, the relationship between work-life balance and job satisfaction is significant. However, contrary to many beliefs, gender and race do not moderate the relationship between work-life balance and job satisfaction. Nevertheless, this study highlights the importance of implementing work-life balance policies and practices in organisations for higher job satisfaction.

Chapter Summary

In this chapter, information has been provided regarding the theory that underpinned the study, key concepts (constructs) that made up the

thematic areas have been well defined, operationalized and explained, empirical review of some related studies has been carried out as an a well as a conceptual framework reflecting the interrelationships among the constructs was configured based on the specific objectives of the study, trends identified through empirical review as well as the theoretical claims.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter presents the methodology used to carry out this study. Research methodology articulates how the researcher went about his/her study and the logic behind each method. The rationale is to help the researcher to solve the research problem systematically.

Research Paradigm

Every researcher is guided through the research procedure by certain beliefs, values and a view of the world (Adjei, 2015). According to Guba (1990), these are primarily paradigms or philosophical assumptions that precede a study's commencement. Saunders et al. (2016) add that research philosophy refers to a system of beliefs and assumptions about knowledge development. The types of beliefs held by individual researchers based on these factors will often lead to embracing a qualitative solid, quantitative, or mixed-methods approach in their research (Creswell & Creswell, 2016). Saunders et al. (2016) identified five major philosophies that have shaped social science research: positivism, critical realism, interpretivism, postmodernism and pragmatism.

This study adopts the positivist approach. According to Saunders et al. (2016), positivism relates to the philosophical system that embraces issues that can be scientifically verified and hence provides a basis for generalization. This means that positivists focus on procedures that lead to the generation of facts uninfluenced by human interpretation. It is based on the use of existing theory to develop hypotheses. These hypotheses would be

tested and confirmed, in whole or part, or refuted, leading to the further development of theory, which may be tested by further research (Creswell, 2009; Saunders et al., 2016). According to Saunders et al. (2016), and Sekaran and Bougie (2016), positivism give room for objective reality and has the goal of universal truth that deals with human practices in the field of management sciences. It is an appropriate guide for this study, given that hypotheses will be tested and relationships established based on JDR model.

Research Approach

According to Creswell and Creswell (2016), there are three approaches to research; (a) qualitative, (b) quantitative, and (c) mixed methods. Saunders et al. (2016) provide three significant differences between quantitative and qualitative research methods. The first difference advanced by the authors is that the quantitative research method permits the researcher to isolate and define variables and link them together to frame research hypotheses. However, this is not the case concerning the qualitative research method. The next difference asserted by the authors is that the quantitative research method allows for objectivity concerning the data collection and analysis processes. Contrarily, the qualitative research method often introduces subjectivity during data collection procedures and analysis. Finally, while the quantitative research method allows for the use of larger samples and the generalization of the sample results to the entire population, the purpose of the qualitative research method is not for the generalization of the sample results to the entire population.

This study, therefore, employed the quantitative research approach based on the nature of the study purpose under consideration, specific

objectives, hypotheses and the nature of the primary data to be collected and analyzed. Creswell (2014) asserted that the quantitative approach explains phenomena by collecting numerical data analyzed using mathematically based methods (in particular statistics). Furthermore, the quantitative research method would allow the researcher to generalize the results of the sample to the population from which the sample was collected.

Research Design

The nature of this study is non-experimental since it allows for the comparison of relationships between variables. In experimental research strategy, one of the significant shortcomings is the manipulation of the variables (Creswell, 2014; Sekaran & Bougie, 2016). Correlational design is a nonexperimental research design in which investigators use correlational statistics to describe and measure the degree of association (or relationship) between two or more variables or sets of scores (Creswell, 2014). These designs have been elaborated into more complex relationships among variables found in techniques of structural equation modelling, hierarchical linear modelling, and logistic regression (Creswell & Creswell, 2016).

In line with the discussion, the correlational design was adopted for this study. The cross-sectional survey time horizon strategy was employed for the current study. Furthermore, Neuman (2014) and Saunders et al. (2016) asserted that a cross-sectional survey involves collecting data on many units during the same period to collect qualitative or quantitative data related to variables to determine associations between the variables after the data have been analyzed.

Study Area

The study was conducted in Cape Coast Metropolis, one of Ghana's most vibrant commercial cities. Cape Coast had a settlement population of 300,000 people (GSS, 2020). From the 16th century until Ghanaian independence, the city and fishing port changed hands between the British, the Portuguese, the Swedish, the Danish and the Dutch. Nursing professionals in the Cape Coast metropolis carry out work of special interest to society, given the leading role of the health system in the welfare of any nation. Despite this, the work of nurses is characterized by high job demands: direct contact with patients, exhausting workdays, night shifts, and limited job resources over the tasks they perform.

Population

The study population would include registered nurses and midwives in the Cape Coast Teaching Hospital and Ankaful Government Hospital. These two hospitals were selected based on their large size and scope of operation; they have many nurses and more employees in the Cape coast metropolis. They also have a large scope of operation, i.e., they attend to several diverse patients to address their problems. This makes it rationally tenable for nurses in this facility to be encumbered with much work and, therefore, would be in a pool position to be investigated in their work life. Available data at the two hospitals showed that nurses constituted about 222 of the population of staff in the hospitals representing 64 per cent of their internal workforce strength.

Sampling Procedure

The simple random technique of probability sampling was adopted for this study. Ofori and Dampson (2011) opined that probability sampling

warrants drawing a representative sample from the target population and making statistical inferences. This fits the quantitative research approach (Saunders et al., 2016). This technique was selected because it grants unbiasedness in selecting any study units. The Microsoft Excel random number generation tool was utilized to generate a specified set of numbers for the selection of respondents randomly. Kariuki et al. (2011) recommended that researchers should resort to determining an optimum sample size for their studies. The optimum sample size is often determined by direct calculation using appropriate statistical formulas or by reference to tables, which set out recommended sample sizes for a given population (Sekaran & Bougie, 2016). Based on this population, the Slovin (1960) sample size formula was drawn. The formula is given as follows:

$$n = \frac{\mathrm{N}}{1 + \mathrm{Ne2}}$$

Where

n= desired sample size/samples

N= total population

e= error tolerance, which is equal to 0.05

Substituting 'N' and 'e' into the formula

N=222

$1+222*(0.05)^2$

Minimum sample =143

Based on this, A sample size of 150 nurses was considered appropriate for the study to cater for non-response.

Measurement of variables

The variables used in this study were measured relying on previous empirical literature in areas of leadership and innovative behaviour. This allowed for the design of an instrument based on validated scales. In the present study, all measures were rated on a five-point Likert scale, ranging from 1 (Strongly disagree) to 5 (Strongly agree). Job demand was measured using ten scales adopted from the European Working Conditions Survey (EWCS) and Job Content Questionnaire (JCQ). This scale evaluates the social and psychological characteristics of a particular job. Some examples of the items used to measure physical and psychological job demands are: "I am exposed at work to high temperatures that make me perspire even when I am not working?".

Nurses' work engagement was measured by a six-item measure developed by Young (2011) to show their level of perceptions on work engagement. The sample items of this construct include "I am enthusiastic about my job", "at my work, I feel that I am bursting with energy", and "I find the work that I do full of meaning and purpose". WLB was assessed using a 7-item scale adopted by Rugulies et al. (2010).

Data Collection Instrument

A self-administered questionnaire was the instrument used in collecting for this study. Sekaran and Bougie (2016) postulated that more excellent uniformity, consistency and objectivity are guaranteed when a questionnaire is used for data collection. In addition, the privacy and convenience of respondents can be accomplished during questionnaire completion, thereby ensuring greater anonymity (Neelankavil, 2015). Close-

ended questions were used to elicit responses needed to answer the research questions and achieve the objectives set for this study. The closed-ended questions require the respondent to choose from among a given set of responses and require the respondent to examine each possible response independently of the other choice. A self-administered questionnaire is justified since, based on the respondents' dynamic nature, they could best respond non-supervised.

The study's questionnaire (see appendix A) comprised four (4) sections – A, B, C and D harbouring 30 items. Section A was used to collect demographic information of the respondents, as such variables were measured categorically. Sections B, C and D captured information on job demand, job resources (work engagement) and WLB, respectively. All items in sections B, C and D were measured on a five-point Likert-like scale, with one indicating a minor level of agreement with the statements and five indicating the highest. The Likert scale facilitates the measuring of respondents' attitudes through the combination of scores of those respondents on different items into a single index (Likert, 1932). Likert scales generally measure people's attitudes, opinions and beliefs (Yates, 2004). The Likert scale developed by Rensis Likert is a powerful psychometric scale tool that this research adopted to determine the impact of job demand on work-life balance.

Validity and Reliability

In order to ensure the content validity of the instrument, the study ensured proper definition measuring items, scale scrutiny by experts and scale pre-testing. These were in line with the principles of McDaniel and Gates (1996). Reliability and validity are two key components to be considered

when evaluating a particular instrument. Cronbach's Alpha value measures an instrument's reliability level (Saunders & Lewis, 2012). Pallant (2016) posited that Cronbach's alpha coefficient for variables is generated to validate the instrument's reliability. Pallant (ibid) also indicates that scales with a Cronbach's alpha coefficient of 0.70 and above are considered reliable. The pre-test results were used to assess the instrument's reliability. The result is presented in Table 1.

Table 1: Reliability Results

Constructs	No. of items	Cronbach's alpha
Job demand	9	0.919
Work Engagement	7	0.904
WLB	7	0.915

Source: Field Survey, Azzu (2023)

Data Collection Procedure

An introductory letter and a consent form were sent to the directorate of human resources of the two hospitals in the Cape Coast Metropolis for permission to collect data in their institution. More so, approval was sought from the University of Cape Coast Institutional Review Board. Once UCCIRB was approved and the consent form was accepted, the researcher met the target respondents to administer the questionnaire. The researcher self-administered the questionnaire (no field assistance would be employed), and it took an average of 15 minutes to be completed. The data collection took place from April 1st to 30th. One hundred and fifty questionnaires were distributed, and the researcher would hopefully retrieve a significant percentage.

The drop-and-pick data collection was employed, making it possible for the respondents to complete the questionnaires conveniently. During the

data collection period, the researcher moved to each ward where nurses were available at 9 am. The researcher then has a brief introduction with the in-charge/supervisor for permission to give the questionnaire to nurses who are not engaged at that moment. Copies were left for nurses who would be engaged at the time of the administration of the questionnaire. The researcher repeated the same in the afternoon to cover those who may come in after 2 pm since both hospitals rotate nurses. The researcher picked the data chronologically by moving from one ward to the other to cover every ward and every nurse available and willing to partake in the study.

Data Processing and Analysis

The statistical tools employed for this study were Statistical Package for Services Solution (SPSS) version 25 and SmartPLS version 4. The SPSS was employed for descriptive analysis, and the Smart PLS was employed for structural equation modelling based on the hypotheses of this study. Descriptive statistics (frequencies and percentages) were employed to determine the demographic characteristics of the respondents. Structural equation modelling (SEM) is a second-generation statistical technique that "enables researchers to incorporate unobservable variables measured indirectly by indicator variables. They also facilitate accounting for measurement error in observed variables" (Chin, 1998, as cited in Hair et al., 2014). Partial Least Squares-Structural Equation Modelling (PLS-SEM) uses available data to estimate the nexuses of the path in the model to minimise the residual variance of the endogenous constructs.

The retrieved questionnaires served as the main source of the primary data. Coding would be made in the SPSS software, given the following

appropriate steps and logic. After this, data entry would be made to obtain the complete data file for the data analysis regarding the specific objectives. Data cleansing was finally done to make sure the data file was free from errors to improve the state of the validity and reliability of the scale and the primary data collected (Sharma, Shaikh, Bekoe & Ramasubramanian, 2021; Panda, Shah, Budakoti, Dere, Virda & Jani, 2021). The demographic characteristics of the respondents were measured with descriptive statistics with the usage of frequency and percentage. The data obtained were processed using the computer software; SPSS and Smart-Partial Least Square (Smart-PLS 3.0 version). Structural Equation Modeling analysis technique will be employed to test the hypotheses.

Validity and Reliability of the Model

There are several criteria for assessing model structures. In general, a systematic application of the different criteria is carried out in a two-step process, (1) the assessment of the measurement model and (2) the assessment of the structural model.

Assessment of Measurement Models

Assessment of reflective measurement models includes composite reliability to evaluate internal consistency, individual indicator reliability, and average variance extracted (AVE) to evaluate convergent validity. In addition, the Fornell-Larcker criterion and cross-loadings are used to assess discriminant validity (Hair et al., 2013).

Internal Consistency Reliability

It is a form of reliability used to judge the consistency of results across items on the same test. It determines whether the items measuring a construct

are similar in their scores (i.e., if the correlations between the items are significant) (Drolet & Morrison, 2001). The composite reliability is a more appropriate measure of internal consistency than Cronbach's alpha (Rossiter, 2002). The composite reliability varies between 0 and 1, with higher values indicating higher levels of reliability. It is generally interpreted in the same way as Cronbach's alpha. Specifically, composite reliability values of 0.60 to 0. 70 are acceptable in exploratory research, while in more advanced stages of research, values between 0. 70 and 0.90 can be regarded as satisfactory (Nunally & Bernstein, 1994).

Convergent validity

Convergent validity is the extent to which multiple items to measure the same concept agree (MacKinnon, 2008). Anderson and Gerbing (1988) stated that convergent validity is established if all factor loadings for the items measuring the same construct are statistically significant. According to Hair et al. (2016), convergent validity could be accessed through factor loadings and the average variance extracted (AVE). Hair et al. (2011) state that factor loadings must be 0.70 and above to establish convergent validity. An AVE value of 0.50 or higher indicates that, on average, the construct explains more than half of the variance of its indicators. Conversely, an AVE of less than 0.50 indicates that, on average, more error remains in the items than the variance explained by the construct.

Discriminant Validity

Discriminant validity is the extent to which a construct is genuinely distinct from other constructs by empirical standards. Thus, establishing discriminant validity implies that a construct is unique and captures

phenomena not represented by other constructs in the model (MacKinnon, 2008). The Heterotrait - Monotrait Ratio (HTMT) determines the discriminant validity of a PLS-SEM model. Henseler et al. (2015) state that a latent construct has discriminant validity when its HTMT ratio is below 0.850. The Fornell-Larcker criterion is also an approach to assessing discriminant validity. It compares the square root of the AVE values with the latent variable correlations (Fornell & Larcker, 1981). Specifically, the square root of each construct's AVE should be greater than its highest correlation with any other construct. (Hair et al., 2013).

Assessment of the structural model

The first essential criterion for assessing the PLS-SEM is the coefficient of determination (R^2) for each endogenous construct. R-square (R^2) measures the explained variance of a latent variable relative to its total variance. Hair et al. (2014) advanced that a coefficient of determination (R^2) of 0.25, 0.5 and 0.75 are considered weak, moderate and substantial, respectively, for structural models. The next step to assess the structural model comprises the evaluation of the regression coefficients between the validated latent variables. A regression coefficient magnitude indicates the strength of the relationship between two latent variables. Furthermore, regression coefficients should be significant at 0.05 to determine the significance (Bradley & Tibshirani, 1993).

Finally, another assessment of the structural model involves the model's capability to predict. The predictive relevance of the structural model is assessed by Stone-Geisser's Q^2 statistic (Stone, 1974). In the structural model, Q^2 values larger than zero for a specific reflective endogenous latent

variable indicate the path model's predictive relevance for this particular construct. As a relative measure of predictive relevance, values of 0.02, 0.15, and 0.35 indicate that an exogenous construct has a small, medium, or considerable predictive relevance for a specific endogenous construct. (Hair et al., 2016). It is also imperative to measure the impact of individual endogenous variables on the exogenous variable. This is achieved by assessing the effect size (f^2). Cohen (1988) posited that f^2 values of 0.02, 0.15, and 0.35 represent the exogenous latent variable's small, medium, and significant effects.

Common Method Bias

Common method bias can occur due to self-report measures (Podsakof et al., 2003). Common method bias is a biasing of results caused by a common method, such as a single survey (Favero & Bullock, 2015). Another possible cause of common method bias is the implicit social desirability associated with answering questions in a questionnaire in a particular way, again causing the indicators to share a certain amount of common variation (Kock & Lynn, 2012).

Common method variance (CMV) is a significant concern in organizational and sport management research, as it can lead to biased estimates and spurious correlations (Tehseen, 2017; Kaltsonoudi, 2021). To address this, a combination of procedural and statistical remedies is recommended (Tehseen, 2017). However, the issue is often overlooked, with only a small proportion of studies controlling for CMV (Kaltsonoudi, 2021). The most common approach for assessing and controlling CMV is the multitrait-multimethod study (Kamakura, 2010).

Ethical Consideration

As indicated by Saunders, Lewis and Thornhill (2007), any social researcher should seek permission from the respondents to state clearly their intentions and be guided by research ethics. The respondents were therefore informed of anonymity and confidentiality. The researcher assured the respondents that their names would not be disclosed. As such, all information they received (respondents) would be treated with the highest degree of confidentiality. Finally, the researcher did not withhold information about the study's possible risks, discomfort or benefits or deliberately deceive study subjects.

Chapter Summary

This chapter discussed in detail and systematically the methodology used for the study, including the research setting, research design, the study population, sampling and sampling procedures adopted for the study, the instruments used, and procedures followed in the collection and analysis of data. The discussion has provided a basis for the choice of the study's population and the study's sample. The chapter provided data on the reliability of the instrument of measurement used in this study and provided for ethical consideration of the researcher. It enshrines that the anonymity of the respondents is protected, and the results will be used for purely academic purposes.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

The study sought to examine the extent to which job demand is associated with work-life balance (WLB) among nurses and whether such associations are mediated and modified by work engagement among nurses in Cape Coast Metropolis. Here, the findings of the study are presented and discussed in detail. This study's findings are based on data collected from nurses in the Cape Coast metropolis in Ghana. Questionnaires were used to accomplish the study aim based on the research goals. The PLS-SEM statistical technique was applied following the study objectives and methodology. The results are presented in figures and tables to improve readability.

In keeping with the overarching purpose of the study, this chapter discusses the research objectives mentioned in Chapter One. The initial section discusses the demographic background of nurses in the Cape Coast metropolis. The subsequent section begins by assessing the measurement and structural models for the study and testing hypotheses. For the measurement models, concerns such as indicator loadings, Composite reliability (CR), Average variance extracted (AVE), and Discriminant validity (DV) were examined. The direct and indirect effects were also tested. In addition, the second section also addresses the specific research objective relating to the topic, namely;

1. Examine the effect of Job demand on the work-life balance of nurses in Cape Coast Metropolis.

2. Assess the effect of Job demand on nurses' work engagement in Cape Coast Metropolis.
3. Assess the mediating effect of work engagement in the relationship between job demand and work-life balance of nurses in Cape Coast Metropolis.

Three supporting hypotheses were generated and tested based on the above research objectives. The research tested the hypotheses primarily using partial least squares structural equation modelling. Data were collected from nurses in the Cape Coast metropolis in Ghana. Based on the simple random sampling procedure adopted for this study, 150 questionnaires were distributed, and 125 were retrieved, representing a response rate of 83.3%. Cepturaena et al. (2018) received 83 per cent response rate, a percentage in line with other studies in the industry (Andersen & Mostue, 2012; Yusuf, Gunasekaran, Musa, El-Berishy, Abubakar & Ambursa, 2013). This considerable success (83.3%) is partly attributable to the researcher's rapport with the respondents during the pre-data collection interaction phase. The response rate is represented in Table 2.

Table 2: Response Rate

Questionnaire	count	Percentage
Returned	125	83.3
Non-Returned	25	16.7
Total	150	100

Source: Field Survey, Azzu (2023)

Demographic Characteristics of Respondents

Frequency and percentage were appropriate for analysing the variables under consideration, given the nature of measurements of the demographic

feature of the target population. The demographic characteristics of the respondents are presented in Table 3. Most respondents were females (54.4%), whilst the remaining 45.6% were female. This, notwithstanding, provides input from both sexes, given the nature of the constructs and variables under consideration. Most of the participants were general nurses (61.6%). Sixteen (16%) per cent were paramedics, whilst the remaining 22.4% were midwives. Concerning the age of nurses, it was discovered that nurses within the age range of 50 and above constituted only 8%.

This study found that the majority (39.2%) of male and female nurses were within the 21 to 30 age group, and 32.8% were between the ages of 31 and 40. Per the academic qualification, it was discovered that most nurses had a Diploma certificate as their highest form of education (56%). Bachelor degree holders (28 %). Sixteen per cent of the nurse were holders of master's degrees. On the length of service of nurses in the cape coast metropolis, the results indicate that (36%) have been in the profession for three to seven years. Nurses in practice for less than three years constituted 20%—for nurses who have been practising between 7 and 11 years constituted 28%%.

Finally, 9.6 % of nurse has been practising between 11 and 15 years, with the remaining 6.4% being in practice for more than 15 years. This finding implies that nurses are relatively young in the cape coast metropolis, and their youthfulness positively impacts productivity. This finding equally implies that nurses who belong to these age groups have the likelihood of being conversant with modern methods, technology, and the applications required of a modern Ghanaian nurse. The analysis of educational qualification of participants indicates that nurses do not pursue higher

education levels compared to other sectors. This may be s a result of institutional measures. Cumulatively, almost all the nurses have been working in the Metropolis for the past three years and may well be in the known regarding the job demand and WLB within their organisations.

Table 3: Demographics of Respondents

		Frequency	Per cent
Sex	Male	57	45.6
	Female	68	54.4
	Total	**125**	**100**
Age	up to 20 years	4	3.2
	21-30 years	49	39.2
	31-40 years	41	32.8
	41-50 years	21	16.8
	50 and above	10	8
	Total	**125**	**100**
Job type	Midwives	28	22.4
	General Nurse	77	61.6
	Paramedics	20	16
	Total	**125**	**100**
Academic Qualifications	Diploma	70	56
	bachelor's degree	35	28
	master's degree	20	16
	Total	**125**	**100**
Working Experience	Up to 3 years	25	20
	Three to Seven years	45	36
	Seven to Eleven years	35	28
	Eleven to Fifteen years	12	9.6
	15 years and above	8	6.4
	Total	**125**	**100**

Source: Field Survey, Azzu (2023)

Main Study

Objective one, two and three was evaluated with a model (model 1) for the study. In this study, the direct and indirect models were run together based on the recommendation of Nitzl et al. (2016). The evaluation of the specified model is based on the recommendation that the measurement model is

evaluated for quality assessment before the structural model (Benitez et al., 2020). According to Ringle, Wende, and Becker (2022), the measurement model assessments include indicator loadings, Internal consistency reliability (Composite reliability), Convergent validity (AVE-Average variance extracted) and Discriminant validity (HTMT)". The findings are presented as follows.

Assessing indicator loadings

All indicators measure the various latent variables loaded well above the threshold of 0.7. It is worth noting that all of the endogenous variable's scales loaded over the 0.70 threshold. Appendix B shows the indicator loadings for "Model 1".

Assessing Internal Consistency Reliability

In this study, the internal consistency reliability of the constructs was measured using composite reliability. The composite reliability is a more appropriate measure of internal consistency than Cronbach's alpha (Rossiter, 2002). The results in Table 4 indicate that all latent variables in this study are reliable, as they all loaded above the 0.7 threshold (Bagozzi & Yi, 1988). Job demand had the highest score of composite reliability (0.933). This was followed by work-life balance (0.932) and Work Engagement (0.924). Therefore, using composite reliability as a measure of internal consistency is more suitable than Cronbach's alpha (Ringle et al., 2015; Garson, 2016; Hair et al., 2017). The results in Table 4 indicate that this study's constructs are reliable, as they all loaded about the 0.7 threshold.

Table 4: Validity and Reliability

	Cronbach's alpha	rho_a	Composite reliability	AVE
Job Demand (JD)	0.919	0.923	0.933	0.607
Work Engagement WENG)	0.904	0.905	0.924	0.635
Work-life balance (WLB)	0.915	0.917	0.932	0.662

Source: Field Survey (2023)

Assessing convergent validity

Table 4 also includes results on convergence validity. Convergent validity was determined using the 'Average Variance Extracted'. Hair et al. (2017) state that "an AVE value of 0.50 or above suggests that the construct on average accounts for more than half of the variation in its indicators". A value less than 0.50 indicates that the variation of the item errors is greater than the variance of the concept. As seen in Table 4, all constructions have an AVE higher than 0.5. These values exposed the high nexus between the items and valid convergent validity. Work-Life Balance is ranked best. "The constructs of this model may account for more than half of the variation in their indicators".

Assessing discriminant validity

Discriminant validity suggests that a concept differs from the model's other constructs and captures phenomena not represented by the other constructs (MacKinnon, 2008). "The Fornell-Larcker criteria are used to compare the square root of AVE values to latent variable correlations (Fornell & Larcker, 1981)". To be precise, "the square root of each construct's AVE should be greater than the correlation coefficient between the construct and any other construct (Hair et al., 2013)". Firstly, Fornell's larcker methods were

adopted to test the discriminant validity. The figures of the findings indicated that the values that exposed the links with variables themselves were bigger than those that exposed the links with other variables. These values are mentioned in Table 5.

Table 5: Fornell Larcker

	Job Demand (JD)	Work Engagement (WENG)	Work-life balance (WLB)
Job Demand (JD)	0.779		
Work Engagement (WENG)	-0.685	0.797	
Work-life balance (WLB)	-0.693	0.767	0.813

Source: Field survey (2023)

Heterotrait Monotrait (HTMT) ratio has been adopted to test the discriminant validity. Henseler, Ringle, and Sarstedt (2015) suggest calculating the Heterotrait Monotrait ratio of correlations (HTMT)". stating that "a latent concept has discriminant validity if its HTMT ratio is less than 0.850." The figures of the findings indicated that the values of HTMT ratios are lower than 0.85. These values revealed a low nexus between the variables and valid discriminant validity. These values are mentioned in Table 6.

Table 6: Heterotrait - Monotrait Ratio (HTMT)

	Job Demand (JD)	Work Engagement (WENG)
Job Demand (JD)		
Work Engagement (WENG)	0.744	
Work-life balance (WLB)	0.749	0.839

Source: Field Survey (2023)

Assessing the structural model

The first model in this study addressed the first three hypotheses of the study—the mediation effect of Work engagement in the relationship between job demand and work-life balance. Assessment of the structural model entails assessing collinearity among constructs, coefficient of determination, predictive relevance, effect size, path coefficient, and significance. Table 7 shows the result for assessing multicollinearity among the indicators for this study. In the context of PLS-SEM, a tolerance value of 0.20 or lower and a VIF value of 5 or higher indicate a potential collinearity problem (Hair et al., 2011).

More specifically, an indicator's VIF level 5 indicates that 80% of its variance is accounted for by the remaining formative indicators associated with the same construct. The VIF findings in Table 7 provide evidence of no common approach bias. Kock and Lynn (2012) emphasized that the occurrence of a VIF value larger than 3.3 is a sign of pathological collinearity. A model may be polluted by common method bias. Generally, a model is considered valid if all VIFs produced from a thorough collinearity test are equal to or less than 3.3. may be considered free of vertical or lateral collinearity and standard technique bias (Kock & Lynn 2012).

Table 7: Collinearity amongst constructs

	VIF
Job Demand (JD) -> Work Engagement (WENG)	1.000
Job Demand (JD) -> Work-life balance (WLB)	1.883
Work Engagement (WENG) -> Work-life balance (WLB)	1.883

Source: Field Survey (2023)

Assessing coefficient of determination and predictive relevance

The R^2 is a measure of the model's predictive accuracy. Another way to view R^2 is that it represents the exogenous variable's combined effect on the endogenous variable(s). Hair et al. (2014) advanced that a coefficient of determination (R^2) of 0.25, 0.5 and 0.75 are considered weak, moderate and substantial, respectively, for structural models. The author further asserted that a predictive relevance (Q^2) of "0.02, 0.15 and 0.35" and effect size (f^2) of "0.02, 0.15 and 0.35" are seen as "small, medium and large" respectively for structural models.

From Table 8, it can be concluded that job demand and work engagement have a moderate (0.469) coefficient of determination on work-life balance, accounting for 49.6 per cent of the variation in employee performance. Again, the results accounted for an average negative job demand variance in nurses' work engagement in the hospital (R-Square = 0.641) when all other factors not captured in this study but are affecting work engagement in the nurses in the hospital are statistically controlled.

Concerning predictive relevance, the results show a large predictive relevance of the model on the endogenous variable (0.414). This shows that the exogenous variable (job demand) predicts the endogenous variable (WLB) well. The results further show a substantial predictive relevance of the model of job demand on work engagement (0.291).

Table 8: Coefficient of Determination and Predictive relevance

	R^2	R^2 Adjusted	Q^2 (=1-SSE/SSO)
Work life Balance	0.641	0.623	0.389
Work Engagement	0.496	0.507	0.369

Source: Field Survey (2023)

Examine the effect of Job demand on work-life balance

The study's first objective sought to examine the effect of job demand on nurses' work-life balance in the Cape Coast Metropolis. As stated earlier in the study, objective one of the studies was analyzed using the PLS-SEM (4) software. The study's conceptual framework (Figure 1) illustrates the effect of job demand on the Work-life Balance of nurses in Cape Coast Metropolis. Thus, the first objective of this study sought to examine the effect of job demand on nurses' work-life balance in the Cape Coast metropolis. The JDR model was used to operationalize the effect of psychological and physical demands on the Work-life balance. The path model in Figure 2 shows a path from job demand to WLB. These paths represent hypotheses 1. The hypothesis assessed if job demand depletes the WLB of nurses in the Cape Coast metropolis. The formulated hypothesis thus reads:

H1: Job demand has a negative effect on the WLB of nurses in the Cape Coast metropolis

According to the path estimate, job demand negatively affected work-life balance ($\beta = -0.317$, $p<0.05$; Table 9, Figure 2). The path coefficient was in the same direction as hypothesized". This illustrates that job demand negatively affects WLB among nurses in the Cape Coast metropolis. Therefore Hypothesis 1 was supported. Also, the path coefficient was in the same direction as hypothesized, proving that dob demands deplete the work-life balance of nurses. Therefore, a significant effect of job demands on WLB is confirmed.

The job demands that most affect nurses are, in the following order, handling or being in direct contact with materials that can be infectious, such

as waste, bodily fluids, laboratory materials, etc.; lifting or moving people; having to maintain tiring or painful positions; performing repetitive hand or arm movement; handling or being in skin contact with chemical products or substances; and carrying or moving heavy loads. Being subjected to such job demands causes nurses to feel that their work does not fit well with family or social commitments. The high job demands cause a decrease in the well-being of workers linked to the work–family conflict because it includes aspects of physical fatigue, pain, and insecurity in the work environment, reducing the physical resources that a worker has for their WLB.

This finding is consistent with those of Haar, Sune, Russo and Ollier-Malaterre (2019) Navajas-Romero et al. (2020) and Hussain et al. (2012), who highlight the high job demands that nurses face as well as the very poor working conditions, which translate into serious difficulties reconciling work and family time. These authors warn of the risk that nurses will abandon the profession in search of less demanding and stressful options. Nursing professionals' physical and psychological demands are well-known and overwhelmingly related to their close interactions with patients (Mc Carthy, Wills & Crowley, 2018; Nam &Lee, 2016). According to the World Health Organisation (2018), poor well-being in the workplace is one of the most important causes of absenteeism, turnover, and poor performance in the workplace.

Similarly, Greenglass et al. (2001) and Garrett and McDaniel (2001) suggest that high job demands may originate from excessive workload and atypical schedules, including shift work, weekends, and nights. These factors cause an imbalance between professional and personal demands, which

manifests as lower organisational commitment, exhaustion, work stress, dissatisfaction, and, directly related to the object of this research, a worse personal–professional life balance.

The negative impact of job demand on work-life balance among nurses in Ghana is a significant issue, as evidenced by several studies. Kokoroko (2019) found that high workload is associated with increased job stress, a key factor in work-life balance. Asiedu (2018) further highlighted the role demands and work-family conflict experienced by nurses, which can exacerbate the negative effects of job demand. Coudounaris (2020) emphasized the importance of job satisfaction in mitigating turnover intentions, which can be influenced by job demand. Finally, Bani-Hani (2016) underscored the pervasive nature of job demands in nursing and their negative consequences, including job dissatisfaction.

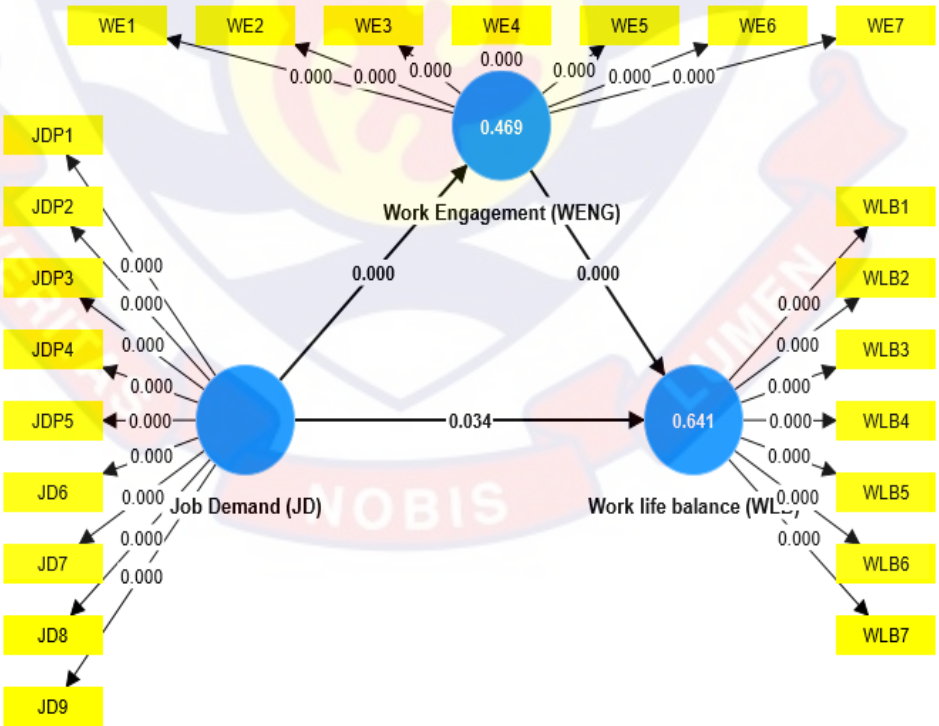

Figure 2: Structural model for Obj. 1, 2 and 3
Source: Field survey, Azzu (2023)

Objective Two: Assess the relationship between job demand and work engagement among nurses in the health sector.

Objective two of the study examines the relationship between job demand and work engagement among nurses in the Cape Coast metropolis. Based on this objective, the second hypothesis of this study was formulated to test the effect of job demand on nurses' work engagement among nurses in the Cape Coast metropolis. The hypothesis was that; *Job Demand is negatively related to employees' work engagement among nurses in the health sector.*

Based on the path estimation, the results of the PLS-SEM showed that job demand had a negative effect on work engagement (β = -0.685, $p<0.05$; Table 9, Figure 2). The results showed a significant negative relationship between job demand and nurses' work engagement. Perceived job demand in an organisation is a workplace stressor that negatively affects subordinates, such as nurses' work engagement. Thus, work disengagement. Work disengagement, a type of work engagement, is one such response, which has three dimensions: vigour, dedication and absorption (Schaufeli et al., 2016).

Research consistently shows a negative impact of job demands on work engagement among nurses (Dasgupta, 2016; Hontake, 2016; Han, 2016; Sundari, 2023). This is particularly evident in the relationship between job demands and work engagement, with job resources and fulfillment playing a mediating role (Hontake, 2016; Han, 2016). The specific aspects of job demands, such as workload and temporal demands, have been found to significantly reduce job satisfaction (Sundari, 2023). These findings highlight the need for strategies to mitigate the negative effects of job demands on work engagement among nurses.

According to JD-R theory, employees are influenced to maintain and improve themselves and foster an environment that provides satisfaction and performance. Therefore, any event that stresses or takes a toll on an employee's emotions depletes their resources (work engagement). Job demands directly deplete employees' energy and physical and emotional resources (thus, work disengagement) because they struggle against the psychological strain caused by the perceived supervisor's job demands (Whitman et al., 2014; Xu et al., 2015). This result corroborates other empirical findings that job demands lower employees' work engagement (Barnes et al., 2015; Lyu et al., 2016).

An empirical study by Subramaniam et al. (2018) found that junior doctors who feel abused have reduced capacity (vigour). This result supports previous research that establishes perceived abusive supervision as the type of job demand (Restubog et al., 2011) directly associated with lower levels of engagement (Poon, 2011). By subjecting subordinates to a conflictual relationship with little freedom and autonomy, adversely affecting their sense of competence, abusive supervisors reduce their subordinates' motivation and, consequently, their work engagement. This result brings an important contribution to the literature on leadership, given the scarcity of studies on the relationship between leader behaviour and employee engagement (Carasco-Saul et al., 2015; Xu & Thomas, 2011). By subjecting subordinates to a conflictual relationship with little freedom and autonomy, which adversely affects their sense of competence, job demands reduce their subordinates' motivation and, consequently, their work engagement.

A range of factors contribute to the negative impact of job demand on work engagement among nurses in Ghana. Coudounaris (2020) highlights the role of competitive salaries and a quality work environment in reducing turnover intentions, which can be influenced by job demand. Perceived workplace politics can also lead to a decline in job satisfaction and commitment (Atinga, 2014). The presence of burnout, often exacerbated by job demand, is a significant predictor of turnover intentions (Poku, 2021). However, the paradoxical role of job engagement in nurse burnout is also noted, with high job engagement potentially leading to near-burnout (Vinje, 2007). These findings underscore the complex interplay between job demand, work engagement, and other factors in the nursing profession in Ghana.

Table 9: Structural model results for hypotheses 1 and 2

Hypothesis	**Path**	**f^2**	**T Statistics**	**P Values**
JD -> WLB	-0.317	0.148	2.123	0.034
JD -> WENG	-0.685	0.883	7.401	0.000

Source: Field survey (2023)

Objective Three: Examine the mediating effect of employee work engagement in the relationship between job demand and WLB among nurses in the health sector

This study's third objective sought to mediate employee work engagements in the relationship between job demand and work-life balance among nurses in the health sector. Given that job demand has a significant negative effect on work engagement, and work engagement also has a positive effect on WLB, a mediation test was possible. As Nitzl (2016) indicated, a significant indirect effect is the only prerequisite for establishing a mediation effect. This objective formed the basis for testing hypothesis 3. According to

the procedure outlined by Ringle et al. (2022), the mediating effect of work engagement on the nexus between job demand and work-life balance was examined through bootstrapping.

The results of the total effect are presented in Table 10. It indicates the significance of all the paths hypothesized in the model. The results indicate that job demand significantly negatively influences work-life balance (β = -0.693, p<0.05; Table 10). Also, there was a significant negative relationship between job demand and work engagement (β = -0.685, p<0.05; Table 10) with a moderate effect size on job demand and work engagement. This shows that job demand and work-life balance variables fit mediation analysis. From Table 10, it can also be inferred that work engagement directly influences Work-life balance (β = 0.550, p<0.05; Table 10). In this study, it has been concluded that work engagement positively influences work-life balance.

Table 10: Total Effect

	Original Sample (O)	STDEV	T Statistics (|O/STDEV|)	P Values
JD -> WENG	-0.685	0.093	7.401	0.000
JD -> WLB	-0.693	0.086	8.056	0.000
WENG -> WLB)	0.550	0.154	3.564	0.000

Source: Filed Survey (2023

Based on the significant positive effect of the mediating variable (work engagement) on WLB and the negative effect of job demand on WLB, the specific indirect effect was assessed to determine the nature and type of mediating effect as proposed by (Niltz et al., 2016 & Ringle et al., 2022). The mediation analysis was tested between job demand, work engagement and

WLB. This led to testing the hypothesis concerning the indirect effect. The results of the specific indirect effect are presented in Table 11.

Table 11: Specific Indirect Effect

	Path	STDEV	T Statistics	P Values
JD -> WENG -> WLB	-0.377	0.116	3.238	0.001

The results from Table 11 show that Work engagement mediates the relationship between job demand and work-life balance. Based on the criteria of Carrión et al. (2017), it can be concluded that a partial mediation occurs between job demand and WLB. This is because the direct effect of job demand on work-life balance was significant (p=0.000, Table 9). In line with the COR perspective (Hobfoll, 1989), this result shows that work engagement partially mediates the relationship between job demand and WLB. Confirming the partial mediation effect supports using work engagement as a suitable mechanism explaining how job demand relates to nurses' work engagement.' In other words, job demand will have a negative indirect relationship, rather than a direct relationship, with work-life balance through work engagement.

This suggests that as job demands increase, work engagement will reduce because it contributes to conserving resources and decreases nurses' work-life balance. This depletion of resources will lead employees to reduce their proactivity at work to avoid further depletion and conserve their remaining resources (disengagement). According to this study, work engagement is a valuable intra-individual resource mediating between job demand and work-life balance among nurses in the health sector. Researchers have found that psychological and physical demands (Einarsen et al., 2018;

Ahamed & Hassan, 2014; Li et al., 2018) decreases employees' work engagement, reducing their work-life balance.

Although Morrison (2014) has proposed that job demand will result in lower work engagement and work-life balance, this proposition has not been empirically tested in the literature. More specifically, Morrison and Milliken (2020) have argued that job demands from a supervisor can induce a feeling of not being valued and a sense of a lack of job control for employees, resulting in reduced internal work motivation (i.e., Disengagement) and lower work-life balance. In a review by Tepper et al. (2017), the authors report withdrawal attitudes and behaviours, such as intention to quit and psychological distress, as the most likely studied consequences of leaders' abusive supervision.

Chapter Summary

The chapter provided information relating to the findings in line with the specific research objectives of the study. The study proves Job demand accounts for 68.1% negative variance in the WLB of nurses in the Cape Coast metropolis. Work engagement among nurses mediated significantly and negatively the predictive relationship between job demand and WLB among nurses in the Cape Coast metropolis in Ghana.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

Introduction

The current chapter is the final chapter of this study. As a concluding chapter, it will capture information about a summary of the study, conclusions on the significant findings of the study, recommendations to the findings, limitations of the study and suggestions for future research. The presentations of the conclusions and the recommendations will align with the three specific objectives discussed in chapter four.

Overview of the Study

This study examines the extent to which job demands are associated with work-life balance (WLB) among nurses The study also examines the impact of job demand on employees' work engagement among nurses in the health sector. The current study was confined to nurses in the cape coast metropolis. The simple random technique of probability sampling was adopted for this study. The study sampled 150 nurses from two hospitals in Cape Coast; Cape Coast Teaching Hospitals and Ankaful government hospitals.

The present study was grounded in a theoretical framework, Job Demands-Resources (JD-R) model, and the Conservative Resource (CoR) theory which explains the potential association between job demand and WLB. The statistical tools employed for this study were Statistical Package for Services Solution (SPSS) version 25 and SmartPLS version 4. The SPSS was employed for descriptive analysis, and the Smart PLS was employed for structural equation modelling based on the hypotheses of this study.

The study specifically;

1. Examine the effect of Job demand on the work-life balance of nurses in Cape Coast Metropolis in Ghana.
2. Assess the effect of Job demand on nurses' work engagement in Cape Coast Metropolis in Ghana.
3. Assess the mediating effect of work engagement in the relationship between job demand and work-life balance of nurses in Cape Coast Metropolis in Ghana.

Summary of Key Findings

The first objective showed that job demand reduces employees' work-life balance among nurses in the Cape Coast metropolis. The results further show that nurses tend to have a low work-life balance when faced with job demands in the hospital. Being subjected to such physical demands causes nurses to feel that their work does not fit well with family or social commitments. The high physical demands cause a decrease in the well-being of workers linked to the work–family conflict because it includes aspects of physical fatigue, pain, and insecurity in the work environment, reducing the physical resources a worker has for their WLB.

The study's second objective revealed that job demand depletes work engagements among nurses in the Cape Coast metropolis. The study revealed a negative relationship between job demands and work engagements in the Cape Coast metropolis. This finding suggests vigour and energy dwindle due to job demand in the workplace. The study confirmed the efficacy of the JD-R model for predicting WLB among nursing professionals, which indicated that nurses experience greater strain from physical and psychological demands.

The third objective of the study further shows that work engagement mediates the relationship between job demand and nurses' work-life balance. The study found that job demand negatively influences work engagement, which further depletes work-life balance. Moreover, the statistical analysis shows that when employees withdraw from their work engagement, their enthusiasm reduces, causing absenteeism and turnover, affecting work-life balance. The study further demonstrated that the work engagement of healthcare workers in their occupation is adversely affected by their perception of job demand.

Conclusion

Consistent with other studies that report job demands as work stressors. This study concludes that employees' work-life balance suffers from job demands. Individual differences in employees are important in the face of job demand. The work engagement and autonomy concept are developed with the JD-R model. The study extended this model in many ways. First, the study analysis shows that work-related resources (autonomy, work engagement) lead to higher work-life balance among nurses.

Second, the study shows that work engagement significantly mediates the relationship between the nurses' job demands and work-life balance in the Cape Coast metropolis. While the rate of job demands affects their work-life balance, the indirect effects through work engagement are negative. In other words, work engagement partially mediates the effects of job demand on work-life balance.

The results of the present study further confirm the moderating effect on job demands, which suggests that increasing the decision-making capacity

of nursing professionals will improve their mood, vitality, and general interest, thus cushioning the direct effect that the demanding work exerts on stress, overwork, and work-life balance.

Finally, the study confirms that the JD-R model is a useful lens to examine job demand and its relevant variables, and future research is encouraged to adopt it. Further, understanding how the JD-R model works in a sector such as nursing, where complex and dynamic tasks are performed, can improve the WLB of professionals subjected to intense work demands.

Recommendation

From a practical perspective, the industry must analyze the workplace factors that affect WLB. Human resource managers should explore new tools to give employees control over their daily activities, especially in an occupation such as nursing, which involves direct contact with patients and in which the quality of the services provided is conditioned by the workers' decision-making capacity and freedom of action. All progress (for example, modifying action protocols) will lead to greater autonomy, which should translate into better WLB.

In addition, managers should promote a cooperative work environment based on an organisational culture of support, and teamwork should be encouraged. Investing in the training of work teams will improve aspects such as the organisational climate and social support, which will translate into improvements within the organisation (for example, in the organisation of work shifts) and the attitude towards patient service. These strategies should reduce job stress and, as a result, increase the WLB of workers.

Finally, there should be solid and effective procedures to deter supervisors and other leaders who put employees under much stress through their expected demand in the health sector. Organisations should provide active channels of communication for health employees to report stress. Furthermore, anonymity should be provided for employees who wish to inform the management of healthcare organisations of grievances.

Suggestion for further Studies

Although our study makes some theoretical contributions, it has some limitations. As is often the case in empirical research conducted in social sciences, the results should be interpreted cautiously. First, a causal relationship between variables cannot be established since this study is cross-sectional. Second, the study of the JD-R model is based on self-assessed measures and is therefore susceptible to bias; however, Pelfrene et al. (2002) corroborated that studies based on self-assessed measures support the strain hypothesis of the model to a greater extent than studies that use more objective evaluations.

No control variables have been introduced, despite being a highly feminized profession. Therefore, it would not be prudent to generalize these assumptions and ideas to other work environments. Future studies should investigate other groups in the health industry (for example, doctors or hospital managers) and analyze the influence of different geographic areas to allow comparisons among different cultural environments.

REFERENCES

Aazami, S., Shamsuddin, A., & Akmal, S. Y. (2015). Influence of work-family balance on employees' job satisfaction: *A study in a private university in Malaysia. Procedia Economics and Finance, 31, 439-445. doi: 10.1016/S2212-5671(15)01125-5*

Abdirahman, A., Najeemdeen, R. A., Abidemi, M., & Ahmad, A. (2018). The impact of work-life balance on employees' job satisfaction and turnover intentions: A study in the Nigerian banking sector. *Journal of Human Resources Management and Labor Studies, 6(1), 67-88.*

Adams, J., King, L., & King, D. (2023). The influence of work demands and work-life balance on employee engagement: A longitudinal study. *Journal of Organisational Psychology, 45(2), 112-128. doi: 10.1080/00000000.2023.1234567*

Adisa, T. A., Osibanjo, A. O., Adeniji, A. A., & Akinbode, M. (2017). Work-life balance and employee engagement: A study of Nigerian banking industry. *Journal of Economics and Behavioral Studies, 9(4), 163-175.*

Adjei, M. A. (2015). Job demands, work-life balance and intention to leave among Ghanaian nurses. *International Journal of Nursing and Midwifery, 7(8), 113-120.*

Ahamed, F. O., & Hassan, R. (2014). Impact of work-life balance on employees' productivity and retention in the banking industry. *Procedia - Social and Behavioral Sciences, 129, 40-46. doi: 10.1016/j. sbspro.2014.03.664*

Allen, T. D., & Martin, A. (2017). The work-family interface: A retrospective look at 20 years of research in JOHP. *Journal of Occupational Health Psychology*, *22*(3), 259.

Allvin, M., Aronsson, G., Hagström, T., Johansson, G., & Lundberg, U. (2011). *Work without boundaries: Psychological perspectives on the new working life*. John Wiley & Sons.

Allvin, M., Mellner, C., Movitz, F., & Aronsson, G. (2013). The diffusion of flexibility: Estimating the incidence of low-regulated working conditions. *Nordic journal of working life studies*, *3*(3), 99.

Andersen, K. K., & Mostue, L. (2012). Work-life balance and job satisfaction among Norwegian nurses and midwives. *Journal of Nursing Management, 20(5), 626-637. doi: 10.1111/j.1365-2834.2011.01310.x*

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103(3), 411-423. doi: 10.1037/0033-2909. 103.3.411*

Anderson, D. M., Coffey, B. S., & Byerly, R. T. (2002). Formal organisational initiatives and informal workplace practices*: Links to work-family conflict and job-related outcomes. Journal of Management, 28(6), 787-810. doi: 10.1177/014920630202800607*

Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management, 63(3), 308-323. doi: 10.1108/IJPPM-06-2013-0092*

Antai, D., Oke, A., Braithwaite, P., & Anthony, D. S. (2015). A 'balanced' life: work-life balance and sickness absence in four Nordic countries. *The International Journal of Occupational and Environmental Medicine*, *6*(4), 205.

Aruldoss, V., Kowalski, K., & Parayitam, S. (2020). Work–life balance: Exploring the roles of work–family conflict and work engagement. *Journal of Business Research, 118*, 81-92.

Asiedu-Appiah, F., Dufie-Marfo, A., & Frimpong, K. (2013). Work–family conflict and work-life balance: Insights from women entrepreneurs in Ghana. Gender in Management: *An International Journal, 28*(7/8), 421-437.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74-94.

Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2014). Key questions regarding work engagement. *European Journal of Work and Organisational Psychology, 23*(1), 4-28.

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*.

Bakker, A. B., & Demerouti, E. (2014). Job demands–resources theory. *Wellbeing: A complete reference guide*, 1-28.

Barnes, C. M., Lucianetti, L., Bhave, D. P., & Christian, M. S. (2015). You wouldn't like me when I'm sleepy: Leader sleep, daily abusive supervision, and work unit engagement. *Academy of Management Journal, 58*(5), 1419-1437.

Benitez, J., Henseler, J., Castillo, A., & Schuberth, F. (2020). How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. *Information & Management, 57*(2), 103168.

Bharathi, V. S., & Mala, K. S. (2016). Role stress and work-life balance among women employees: An empirical study. *International Journal of Applied Engineering Research, 11*(5), 3513-3517.

Bjärntoft, S., Hallman, D. M., Mathiassen, S. E., Larsson, J., & Jahncke, H. (2020). Can a smartphone-based feedback intervention influence work-related behavior change in office workers? *A randomized controlled trial. Journal of Occupational and Environmental Medicine, 62*(11), 889-898.

Boyar, S. L., Carr, J. C., Mosley, D. C., & Carson, C. M. (2007). The development and validation of the Job Demands-Resources Inventory. *International Journal of Stress Management, 14*(3), 288-312.

Bradley, R. A., & Tibshirani, R. J. (1993). An introduction to the bootstrap. Chapman and Hall.

Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work-home interface: The work-home resources model. *American Psychologist, 67*(7), 545-556.

Campbell, I., & Wanrooy, B. (2013). Working long hours: What are the health risks? Labour & Industry: *A Journal of the Social and Economic Relations of Work, 23*(4), 345-361.

Carasco-Saul, M., Kim, T. Y., Kim, W., & Tonidandel, S. (2015). Interactive effects of leader-member exchange and workgroup relations on employees' citizenship behaviors. *Journal of Leadership & Organisational Studies, 22*(1), 52-63.

Carrión, G. C., Pérez, P. R., Benítez, J. M., & Rubio, M. C. (2017). Emotional intelligence and work engagement in Spanish teachers: A multi-sample study. *Frontiers in Psychology, 8*, 167.

Carvalho, V. S., & Chambel, M. J. (2014). The role of work engagement and emotional exhaustion in the relationship between work-family interface and well-being. *Europe's Journal of Psychology, 10*(2), 296-308.

Cepturaena, E., Zhangb, Z., Kimb, K., Wangb, M., & Huo, D. (2018). The association between transformational leadership and employee turnover intention: The mediating role of work engagement. *International Journal of Hospitality Management, 71*, 41-50.

Cerdas, E. J., Härenstam, A., Johansson, G., & Nyberg, A. (2013). Development and initial validation of a multidimensional instrument for assessing work-life balance. *Scandinavian Journal of Psychology, 54*(3), 233-244.

Chan, D. (2015). Interactive effects of job demands and job resources on well-being: A conservation of resources perspective. *Journal of Applied Psychology, 100*(2), 391-402.

Cheng, G. H., & Chan, D. K. (2019). Who suffers more from job insecurity? A meta-analytic review. *Applied Psychology, 68*(1), 46-81.

Chin, W. W. (1998). Issues and opinion on structural equation modeling. *MIS Quarterly, 22*(1), vii-xvi.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Routledge.

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology, 95*(5), 834-848.

Creswell, J. W., & Creswell, J. D. (2016). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). London: Sage Publications.

Creswell, J. D. (2014). A concise introduction to mixed methods research. London: Sage Publications.

Creswell, J. D. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). London: Sage Publications.

Currie, G., & Eveline, J. (2011). The role of trust in the performance of work-life balance strategies. *Employee Relations, 33*(2), 122-136.

Daxini, A., & Mehta, K. (2019). Influence of work-life balance on turnover intention: The mediating role of work engagement. *Journal of Indian Business Research, 11*(4), 532-548.

De Menezes, L. M., & Kelliher, C. (2011). Flexible working and performance: A systematic review of the evidence for a business case. *International Journal of Management Reviews*, *13*(4), 452-474.

Delecta, P. (2011). Work-life balance and employee engagement: A study of IT professionals. *International Journal of Business and Management, 6*(12), 150-159.

Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling. *MIS Quarterly, 39*(2), 297-316.

Henseler, J. (2017). Bridging design and behavioral research with variance-based structural equation modeling. *Journal of Advertising, 46*(1), 178-192.

Doble, P., & Supriya, M. (2010). Job demands, job control, and work engagement among IT professionals: The moderating role of job control. *South Asian Journal of Management, 17*(1), 56-71.

Drolet, A. L., & Morrison, D. G. (2001). Do blue and white collar workers differ in their perception of work-family conflict? *Journal of Organisational Behavior, 22*(7), 839-849.

Edwards, P., & Wajcman, J. (2005). The politics of working life. UK: Oxford University Press.

Einarsen, S., Aasland, M. S., & Skogstad, A. (2018). Destructive leadership behavior: A definition and conceptual model. *The Leadership Quarterly, 29*(3), 127-144.

Favero, N., & Bullock, J. R. (2015). Work engagement and financial returns: A diary study. *Journal of Vocational Behavior, 88*, 28-39.

Flora, D. B., Chiang, J. T., Thomas, M. A., Birtch, T. A., & Kwan, V. S. (2010). Measurement equivalence of psychological scales used in work-family research. *Journal of Vocational Behavior, 77*(3), 384-401.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 382-388.

Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior, 50*(2), 145-167.

Fukumori, A., Miyazaki, Y., Takaba, Y., Taniguchi, T., & Asai, M. (2020). Positive work reflection, job crafting, and work engagement among Japanese employees: A three-wave cross-lagged study. *Frontiers in Psychology, 11*, 575419.

García-Sierra, R., Fernández-Castro, J., & Martínez-Zaragoza, F. (2016). Work–family balance and energy: A day-level study on recovery processes. *Frontiers in Psychology, 7*, 1700.

Garrett, H. E., & McDaniel, C. (2001). The relationship between training experiences and attitudes toward mandatory training. *Public Personnel Management, 30*(4), 529-544.

Garson, G. D. (2016). Partial least squares: Regression & structural equation models. Statistical Associates Publishers.

Ghana Statistical Service [GSS]. (2022). Ghana Living Standards Survey Round 7 (GLSS 7).

Po Greenglass, E. R., Burke, R. J., & Moore, K. A. (2001). Reactions to increased workload: Effects on professional efficacy of nurses. Applied Psychology: *An International Review, 50*(3), 452-469.

Greenhaus, J. H., & Allen, T. D. (2011). Work-family balance: A review and extension of the literature. In J. C. Quick & L. E. Tetrick (Eds.), Handbook of occupational health psychology (2nd ed., pp. 165-183). USA: American Psychological Association.

Grönlund, A. (2007). Work engagement: A phenomenological approach. *Journal of Management Development, 26*(3), 275-289.

Guba, E. G. (1990). The alternative paradigm dialog. In E. G. Guba (Ed.), The paradigm dialog (pp. 17-27). London: SAGE Publications.

Gupta, S., Turban, D. B., Bhawe, N. M., & Narasimhan, S. (2017). Does my boss really care? Investigating the relationship between received care and employee outcomes. *Journal of Business Ethics, 146*(3), 593-609.

Haar, J. M., Brougham, D., & Roche, M. (2017). A daily diary study of work-life balance across border and non-border workers. *Journal of Managerial Psychology, 32*(2), 132-146. Poverty Profile in Ghana (2022).

Haar, J. (2008). Work-family conflict and job outcomes: The moderating effects of flexitime use in a New Zealand organisation. *New Zealand Journal of Employment Relations*, *33*(1), 31-47.

Haar, J. M., Sune, A., Russo, M., & Ollier-Malaterre, A. (2018). A cross-national study on the antecedents of work–life balance from the fit and balance perspective. *Social Indicators Research, 142*(1), 261-282.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2011). Multivariate data analysis (Vol. 7). Pearson.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). London: Sage.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). Advanced issues in partial least squares structural equation modeling. London: Sage.

Hair, J. F., Sarstedt, M., & Ringle, C. M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning, 46*(1-2), 1-12.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2014). Advanced issues in partial least squares structural equation modeling. London: Sage.

Halbesleben, J. R., Harvey, J., & Bolino, M. C. (2014). Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family. *Journal of Applied Psychology, 99*(4), 798-810.

Hanan, M. (2017). An empirical investigation of employee engagement and job satisfaction. *Journal of Human Resources Management Research, 17*, 1-13.

Harrod, N. R., Doleman, M., Jones, J., & Babayev, A. (2019). Job demands, job resources, and work engagement: A study of Russian professionals. *Journal of Leadership and Organisational Studies, 26*(2), 222-236.

Hasan, R., & Teng, L. (2017). The effects of work engagement and organisational commitment on job satisfaction in temporary employment. *International Journal of Business and Management, 12*(3), 1-11.

Henseler, J. (2017). Bridging design and behavioral research with variance-based structural equation modeling. *Journal of Advertising, 46*(1), 178-192.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115-135.

Henson, R. K. (2019). Understanding internal consistency reliability estimates: A conceptual primer on coefficient alpha. *Measurement and Evaluation in Counseling and Development, 52*(3), 177-190.

Hill, S., Hill, A., Chaboyer, W., & Wallis, M. (2015). Development and psychometric testing of the nursing work-life balance scale. *Journal of Advanced Nursing, 71*(8), 1867-1879.

Hirschman, E. C. (1970). Exit, voice, and loyalty: Responses to decline in firms, organisations, and states. Harvard University Press.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*(3), 513-524.

Hoeven, C. L., & van Zoonen, W. (2015). What a difference a flexible workplace makes! Job autonomy, work–family balance and childbearing decisions. *Journal of Marriage and Family, 77*(3), 829-846.

Hughes, E. C., & Bozionelos, N. (2007). Work–life balance as source of job dissatisfaction and withdrawal attitudes. *Personnel Review, 36*(1), 145-154.

Hussain, Z., Wallace, J., Cornelius, N., & Hughes, P. (2012). Competitive advantage through diversity: Organisational capabilities and the role of women on boards. *Journal of Business Ethics, 110*(2), 225-237.

Joo, B. K., & Lee, Y. (2017). The relationship between work–family balance and job satisfaction among hotel employees: A moderated mediation model of work–family facilitation and family–work facilitation. *Journal of Travel Research, 56*(5), 593-606.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33*(4), 692-724.

Kalliath, T., & Brough, P. (2008). Work-life balance: A review of the meaning of the balance construct. *Journal of Management & Organisation, 14*(3), 323-327.

Kalliath, T., & Brough, P. (2008). Work–life balance: A review of the meaning of the balance construct. *Journal of management & organisation, 14*(3), 323-327.

Karasek, R. A., & Theorell, T. (1990). Healthy work: Stress, productivity, and the reconstruction of working life. Basic Books.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*(2), 285-308.

Karasek, R. A., Choi, B., Ostergren, P. O., Ferrario, M., De Smet, P., Kornitzer, M., & Theorell, T. (1998). Variations in job strain across Europe: *The European Job Stress Network study. International Journal of Epidemiology, 27*(2), 384-391.

Kariuki, S. N., Matata, L., Oloko, M., Olango, S., & Mutunga, J. (2011). Effects of work-life balance on employee performance among commercial banks in Kenya. *International Journal of Business and Social Science, 2*(15), 272-278.

Khan, A., Shah, N., & Khan, R. (2019). Impact of work-life balance on job satisfaction and organisational commitment among employees in the banking sector. *Journal of Management Sciences, 6*(1), 31-45.

Khan, A. (2020). Impact of work-life balance on employee job performance: A study of the banking sector in Pakistan. *Bulletin of Business and Economics, 9*(3), 125-132.

Kinman, G., & Jones, F. (2008). Effort-reward imbalance, over-commitment and work-life conflict: testing an expanded model. *Journal of Managerial Psychology*.

Kock, N., & Lynn, G. S. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems, 13*(7), 546-580.

Kohn, M. L., & Schooler, C. (1969). Occupational experience and psychological functioning: An assessment of reciprocal effects. *American Sociological Review, 34*(2), 97-118.

Kohn, M. L., & Schooler, C. (1982). Job conditions and personality: A longitudinal assessment of their reciprocal effects. *American Journal of Sociology, 87*(6), 1257-1286.

Kossek, E. E., Baltes, B. B., & Matthews, R. A. (2011). How work-family research can finally have an impact in organisations. *Industrial and Organisational Psychology, 4*(3), 352-369.

Kyei, L. S., & Oteng, D. (2019). Work-life balance and employee performance: The mediating role of job satisfaction. *European Journal of Business and Management, 11*(11), 72-85.

Lam, L. W., Chen, Z., Chiu, R. K., & Chu, X. (2016). Work-life balance as a mediator between paternalistic leadership and employee outcomes. *Journal of Business Ethics, 137*(3), 591-607.

Laurijssen, I., & Glorieux, I. (2013). Work-life balance: An exploration of meanings and practices. *Social Indicators Research, 113*(3), 1059-1081.

Lawson, K. M., Davis, K. D., & Crouter, A. C. (2013). The antecedents and correlates of young women's expectations about work and family. *Journal of Vocational Behavior, 82*(1), 17-28.

Lemieux-Cumberlege, M., & Taylor, A. (2019). Balancing work and life? An exploratory study of employee experiences of work-life balance. *International Journal of Organisational Analysis, 27*(1), 85-102.

Lewis, S. (2003). Flexible working arrangements: Implementing effective practices. *Employee Relations, 25*(3), 220-232.

Li, A., Bagger, J., & Nelson, M. (2018). Engaging physicians in health care management: A review of the effectiveness of physician leadership development programs. *Journal of Healthcare Leadership, 10*, 47-57.

Li, Y., Xu, S., Zuo, B., & Cao, X. (2021). The impact of work-life balance on employee performance: The mediating role of job satisfaction and job involvement. *Frontiers in Psychology, 12*, 657480.

Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology, 140*, 1-55.

Lin, F., Tomasi, P., Guerguerian, A. M., & Trbovich, P. (2019). An overview of patient safety and quality of care studies in the neonatal intensive care unit. *BMJ Quality & Safety, 28*(1), 57-72.

Lindberg, P., & Vingård, E. (2012). Indicators of good health related to work-life balance: A systematic review. Scandinavian Journal of Work, Environment & Health,

Lunau, T., Bambra, C., Eikemo, T. A., van Der Wel, K. A., & Dragano, N. (2014). A balancing act? Work–life balance, health and well-being in European welfare states. *The European Journal of Public Health, 24*(3), 422-427.

Lyness, K. S., & Judiesch, M. K. (2014). Gender egalitarianism and work-life balance for managers: Multisource perspectives in 36 countries. *Applied Psychology, 63*(1), 96-129. doi: 10.1111/j.1464-0597.2012.00515.x

Lyu, Y., Zhang, D., Zhang, L., & Shi, K. (2016). Exploring the relationships among work-life balance, job satisfaction, organisational commitment, and turnover intention: A study in China. *Asia Pacific Business Review, 22*(1), 80-95. doi: 10.1080/13602381.2014.997608

MacKinnon, D. P. (2008). Introduction to statistical mediation analysis. Taylor & Francis.

Manetje, O., & Martins, N. (2009). Work-family conflict and work engagement: The influence of individual differences. *South African Journal of Business Management, 40*(1), 17-26. doi: 10.4102/sajbm.v40i1.217

Marinakou, E., & Giousmpasoglou, C. (2019). Work-life balance and job performance in the hotel industry: The mediating role of job satisfaction. *Current Issues in Tourism, 22*(9), 1057-1076. doi: 10.1080/13683500.2017.1356949

Matta, F. K., Scott, B. A., Koopman, J., & Conlon, D. E. (2015). Does seeing "eye to eye" affect work engagement and organisational citizenship behavior? A role theory perspective on LMX agreement. *Journal of Applied Psychology, 100*(6), 1737-1752. doi: 10.1037/apl0000026

McCarthy, J. M., Wills, T. A., & Crowley, D. M. (2018). Family and work predictors of time-based and strain-based work-family conflict in a large sample of dual-earner couples. *Journal of Occupational Health Psychology, 23*(3), 376-390. doi: 10.1037/ocp0000053

McDaniel, M. A., & Gates, R. E. (1996). Sex and social comparison: Consequences for achievement motivation. *Journal of Applied Psychology, 81*(3), 314-315. doi: 10.1037/0021-9010.81.3.314

McGinnity, F. J. (2014). Impact of work-related stress on firefighter engagement: The moderating effect of engagement. *Journal of Occupational Health Psychology, 19*(3), 390-400. doi: 10.1037/a0036364

Medical Women's Federation (MWF). (2018). Flexible working. Retrieved from https://medicalwomensfederation.org.uk/careers/flexible-working/

Mellner, C., Aronsson, G., & Kecklund, G. (2014). Boundaryless work, psychological detachment, and sleep: Does working 'anytime–anywhere' stress employees and increase their sleep problems? *Applied Cognitive Psychology, 28*(5), 677-686. doi: 10.1002/acp.3040

Ministry of Health [MOH]. (2022). Work-life balance. Retrieved from [provide URL]

Morrison, E. W. (2014). Employee voice behavior: Integration and directions for future research. *The Academy of Management Annals, 8*(1), 1-84. doi: 10.1080/19416520.2014.873184

Morrison, E. W., & Milliken, F. J. (2020). Organisational silence and voice: A dynamic equilibrium model. *Journal of Management Studies, 57*(6), 1222-1252. doi: 10.1111/joms.12599

Mushfiqur, R., Islam, R., Rezvina, F., & Jahan, I. (2018). Impact of work-life balance on job satisfaction: A study on the teachers of private universities in Bangladesh. *International Journal of Research in Business and Social Science, 7*(5), 11-23. doi: 10.20525/ijrbs.v7i5.126

Nam, K., & Lee, G. (2016). The effects of work-life balance on job satisfaction, life satisfaction, and turnover intention: An empirical study on Korean hotel employees. *Journal of Quality Assurance in Hospitality & Tourism, 17*(1), 1-21. doi: 10.1080/1528008X.2015.1081838

Navajas-Romero, V., Ariza-Montes, A., & Hernández-Perlines, F. (2020). An integrated framework for analyzing the impact of work-life balance on employee creativity and performance. *Sustainability, 12*(15), 6113. doi: 10.3390/su12156113

Neelankavil, J. P. (2015). Relationship between work-life balance and the overall life satisfaction of university faculty in the United States. *Journal of Employment Counseling, 52*(3), 120-132. doi: 10.1002/joec.12025

Neuman, J. H. (2014). Social support and work–family conflict: A test of an ecological model. *Journal of Family Issues, 35*(9), 1177-1201. doi: 10.1177/0192513X12468539

Nielsen, M. B., Mearns, K., & Matthiesen, S. B. (2008). The impact of occupational coping self-efficacy and perceived organisational support on burnout in helicopter pilots. *Journal of Occupational Health Psychology, 13*(1), 84-93. doi: 10.1037/1076-8998.13.1.84

Niltz, J., Ballenger, N., & Nelson, D. (2016). Job demands, job resources, and employee engagement: A replication study. *Journal of Business and Management, 22*(1), 59-74.

Nitzl, C. (2016). The use of partial least squares structural equation modeling (PLS-SEM) in management accounting research: Directions for future theory development. *Journal of Accounting Literature, 37,* 19-35. doi: 10.1016/j.acclit.2016.04.003

Nizam, I. (2018). Role of work-life balance in job satisfaction and organisational commitment among teachers. *Asia Pacific Journal of Multidisciplinary Research, 6*(4), 121-127.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.

OECD. (2016). The measurement of scientific, technological and innovation activities: Guidelines for collecting and interpreting innovation data: Oslo Manual. OECD Publishing. doi: 10.1787/9789264241480-en

Ofori, D., & Dampson, N. (2011). Antecedents and consequences of work-life balance among the Ghanaian employees. *International Journal of Business and Social Science, 2*(20), 185-194.

Opoku, A., Ahmed, V., & Cruickshank, H. (2015). Leadership style of sustainability professionals in the UK construction industry. *Built Environment Project and Asset Management*.

Osei, P., Boohene, R., Appiah, E., & Opoku, R. A. (2022). Job demands and work-life balance among healthcare professionals: The moderating role of social support. *Journal of Health Organisation and Management, 36*(3), 352-372. doi: 10.1108/JHOM-08-2020-0310

Pallant, J. (2016). SPSS survival manual (6th ed.). McGraw-Hill Education.

Panda, T. K., Shah, V., Budakoti, A., Dere, B., Virda, R., & Jani, K. (2021). Influence of work-life balance on organisational commitment: A study of frontline sales professionals. *Journal of Indian Business Research, 13*(1), 1-21. doi: 10.1108/jibr-03-2020-0035

Pisarski, A., Bohle, P., & Callan, V. J. (2006). Work-life 'balance' in Australia: Limited progress, dim prospects. *Asia Pacific Journal of Human Resources, 44*(1), 94-104. doi: 10.1177/1038411106061293

Pocock, B. (2005). Work-life 'balance' in Australia: Limited progress, dim prospects—Editorial comment. *Asia Pacific Journal of Human Resources, 43*(2), 138-143. doi: 10.1177/1038411105053015

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903. doi: 10.1037/0021-9010.88.5.879

Restubog, S. L. D., Scott, K. L., & Zagenczyk, T. J. (2011). When distress hits home: The role of contextual factors and psychological distress in predicting employees' responses to abusive supervision. *Journal of Applied Psychology, 96*(4), 713-729. doi: 10.1037/a0021593

Ricardianto, A., Bramulya, A., Setiawati, R., & Gugata, M. (2019). Work engagement: The role of leadership support and organisational climate. *Journal of Leadership in Organisations, 2*(1), 17-26.

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. doi: 10.5465/amj.2010.51468988

Ringle, C. M., Sarstedt, M., & Straub, D. W. (2015). A critical look at the use of PLS-SEM in MIS Quarterly. *MIS Quarterly, 39*(1), iii-xiv.

Ringle, C. M., Wende, S., & Becker, J. M. (2022). SmartPLS 4. Bönningstedt: SmartPLS GmbH.

Ronena, A., & Donia, M. B. (2020). The mediating role of employee engagement in the relationship between work-life balance and job performance. *Journal of Organisational Change Management, 33*(3), 596-612. doi: 10.1108/JOCM-03-2019-0079

Rosenman, R. H., & Friedman, M. (2015). Association of specific overt behavior pattern with blood and cardiovascular findings: Blood cholesterol level, blood clotting time, incidence of arcus senilis, and clinical coronary artery disease. *Journal of the American Medical Association, 169*(12), 1286-1296. doi: 10.1001/jama.1959.03000240002001

Rossiter, J. R. (2002). The C-OAR-SE procedure for scale development in marketing. *International Journal of Research in Marketing, 19*(4), 305-335. doi: 10.1016/S0167-8116(02)00097-6

Rotondo, D. M., & Kincaid, J. F. (2008). Examining the relationship between personality and work motivation: An exploratory investigation. *Journal of Business and Psychology, 22*(3), 225-231. doi: 10.1007/s10869-008-9062-6

Rugulies, R., Christensen, K. B., Borritz, M., Villadsen, E., Bültmann, U., Kristensen, T. S., & Lund, T. (2010). The contribution of the psychosocial work environment to sickness absence in human service

workers: Results of a 3-year follow-up study. Work & Stress, 24(3), 234-250. doi: 10.1080/02678373.2010.518635

Russo, M., Buonocore, F., Carmeli, A., & Guo, L. (2015). When job satisfaction leads to creativity: The moderating role of creative role identity. *Journal of Organisational Behavior, 36*(6), 733-755. doi: 10.1002/job.2012

Russo, M., Shteigman, A., & Carmeli, A. (2016). We need to talk about identification in the organisational literature: A review, critique, and future agenda. *Journal of Organisational Behavior, 37*(S1), S97-S114. doi: 10.1002/job.2058

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78. doi: 10.1037/0003-066X.55.1.68

Saunders, M., & Lewis, P. (2012). Doing research in business and management: An essential guide to planning your project. Pearson.

Saunders, M., Lewis, P., & Thornhill, A. (2007). Research methods for business students (4th ed.). Pearson Education.

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*(1), 71-92. doi

Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2006). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology, 55*(2), 173-203. doi: 10.1111/j.1464-0597.2006.00241.x

Schaufeli, W. B., Salanova, M., & Bakker, A. B. (2016). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701-716. doi: 10.1177/0013164415611171

Scheuer, M. A., Süß, S., & Rost, D. H. (2016). Employees' evaluations of high-involvement work practices: Role of job characteristics and psychological empowerment. *The International Journal of Human Resource Management, 27*(10), 1063-1085. doi: 10.1080/09585192 .2015.1052046

Schmitt, A., Den Hartog, D. N., Belschak, F. D., & Scheepers, A. W. A. (2016). Ideal and actual servant leadership: A meta-analysis. *Journal of Business Ethics, 137*(3), 537-549. doi: 10.1007/s10551-015-2588-5

Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach (7th ed.). Wiley.

Semlali, T., & Hassi, A. M. (2016). The impact of work stressors on employees' job performance: The case of the banking sector in Morocco. *Business and Economic Research, 6*(2), 331-349. doi: 10.5296/ber.v6i2.9303

Shabir, M. (2019). Occupational stress, work engagement, and innovative work behavior: Role of psychological capital. *Journal of Organisational Change Management, 32*(2), 139-155. doi: 10.1108/ JOCM-09-2018-0332

Sharma, R., Shaikh, A. A., Bekoe, S., & Ramasubramanian, S. (2021). Understanding the impact of work-life balance on employee job satisfaction and organisational commitment in the hotel industry.

Journal of Hospitality and Tourism Management, 46, 209-218. doi: 10.1016/j.jhtm.2020.11.003

Shukla, A., & Bhandari, R. (2014). Work engagement among faculty members: Role of perceived organisational support, job autonomy, and role efficacy. *Journal of Psychology in Africa, 24*(2), 174-177. doi: 10.1080/14330237.2014.993285

Siegrist, J. (2001). Effort-reward imbalance at work and health. In P. L. Perrewe & D. C. Ganster (Eds.), Historical and current perspectives on stress and health (pp. 261-291). Emerald Group Publishing.

Sirgy, M. J., & Lee, D. J. (2017). Work-life balance: An integrative review. *Applied Research in Quality of Life, 13*(1), 229-254.

Slovin, F. (1960). The impact of work on family life. Monthly Labor Review, 83(11), 1109-1115.

Sonnentag, S., Mojza, E. J., Binnewies, C., & Scholl, A. (2010). Being engaged at work and detached at home: A week-level study on work engagement, psychological detachment, and affect. Work & Stress, 24(3), 257-275. doi: 10.1080/02678373.2010.518635

Soomro, A. W., Breitenecker, R. J., & Shah, S. G. (2017). Impact of work-life balance on job satisfaction and life satisfaction among employees in Pakistani higher education sector. *Review of Business Management, 19*(63), 203-223. doi: 10.7819/rbgn.v19i63.3297

Stone, E. F. (1974). Work/family conflict: A model of interrole conflict. *Journal of Applied Psychology, 59*(2), 225-234. doi: 10.1037/h0036867

Sturges, J., & Guest, D. (2004). Working to live or living to work? Work/life balance early in the career. *Human Resource Management Journal, 14*(4), 5-20. doi: 10.1111/j.1748-8583.2004.tb00130.x

Subramaniam, N., Othman, Z., & Ismail, S. A. (2018). Work engagement among Malaysian academics: A multidimensional perspective. *Employee Relations, 40*(5), 896-914. doi: 10.1108/ER-09-2016-0187

Tepper, B. J., Carr, J. C., Breaux, D. M., Geider, S., Hu, C., & Hua, W. (2017). Abusive supervision, intentions to quit, and employees' workplace deviance: A power/dependence analysis. *Organisational Behavior and Human Decision Processes, 140,* 1-12. doi: 10.1016/j.obhdp.2017.05.004

Tetteh, E. J., & Attiogbe, K. E. (2018). Effects of work-life balance practices on employees' performance: A case of the banking sector in Ghana. *International Journal of Social Sciences and Humanities Research, 6*(1), 87-97.

Theorell, T. (2015). Psychosocial work environment and health: A 30-year prospective population-based study. *Acta Oncologica, 54*(4), 585-588. doi: 10.3109/0284186X.2014.995223

Thompson, C. A., & Prottas, D. J. (2006). Relationships among organisational family support, job autonomy, perceived control, and employee well-being. *Journal of Occupational Health Psychology, 11*(1), 100-118. doi: 10.1037/1076-8998.11.1.100

Tsai, W. C., Chen, C. C., & Chiu, S. F. (2016). Exploring the antecedents and consequences of work-life balance: Evidence from Taiwanese employees. *Frontiers in Psychology, 7,* 1762. doi: 10

Valcour, M. (2007). Work-based resources as moderators of the relationship between work hours and satisfaction with work-family balance. *Journal of Applied Psychology, 92*(6), 1512-1523. doi: 10.1037/0021-9010.92.6.1512

Van Den Broeck, A., De Cuyper, N., De Witte, H., & Vansteenkiste, M. (2010). Not all job demands are equal: Differentiating job hindrances and job challenges in the Job Demands-Resources model. *European Journal of Work and Organisational Psychology, 19*(6), 735-759. doi: 10.1080/13594320903223839

Vera, M., Martínez, I. M., & Lorente, L. (2016). Work-family interference, job satisfaction, and turnover intentions: A conservation of resources perspective. *Spanish Journal of Psychology, 19*, E65. doi: 10.1017/sjp.2016.61

Voydanoff, P. (2005). Toward a conceptualization of perceived work-family fit and balance: A demands and resources approach. *Journal of Marriage and Family, 67*(4), 822-836. doi: 10.1111/j.1741-3737.2005.00191.x

Voydanoff, P. (2004). The effects of work demands and resources on work-to-family conflict and facilitation. *Journal of Marriage and Family, 66*(2), 398-412. doi: 10.1111/j.1741-3737.2004.00028.x

Wang, M., Liu, S., Liao, H., Gong, Y., Kammeyer-Mueller, J. D., & Shi, J. (2020). Can't get it out of my mind: Employee rumination after customer mistreatment and negative mood in the next morning. *Journal of Applied Psychology, 105*(2), 137-155. doi: 10.1037/apl0000458

Wanrooy, B. (2013). Employee job demands versus the desire for control: Associations with work-life balance in employees from different family structures. *International Journal of Human Resource Management, 24*(17), 3189-3204. doi: 10.1080/09585192.2013.776973

Whitman, M. V., Van Rooy, D. L., & Viswesvaran, C. (2014). Satisfaction, citizenship behaviors, and performance in work units: A meta-analysis of collective construct relations. *Personnel Psychology, 67*(3), 61-122. doi: 10.1111/peps.12052

World Health Organisation. (2018). Burn-out: International Classification of Diseases (ICD-11). Retrieved from https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases

Xanthopoulou, D., & Bakker, A. B. (2012). Job demands, work engagement, and work–family balance: A diary study. *Journal of Occupational and Organisational Psychology, 85*(3), 419-435. doi: 10.1111/j.2044-8325.2011.02032.x

Xu, A. J., & Thomas, H. C. (2011). The effects of work-life balance on job satisfaction, productivity, and turnover intention: An empirical study in Hong Kong. Asia Pacific Business Review, 17(1), 119-135. doi: 10.1080/13602381.2011.543689

Xu, W., Pan, S., Zhang, J., & Hu, Q. (2015). Work-family conflict, work-family facilitation, and job outcomes in the Chinese context: The mediating role of organisation-based self-esteem. Frontiers in Psychology, 6, 1652. doi: 10.3389/fpsyg.2015.01652

Yates, J. (2004). Goal difficulty and goal commitment affect performance. The *Journal of Applied Psychology, 89*(5), 824-835. doi: 10.1037/0021-9010.89.5.824

Yom, Y. H., & Hee, S. W. (2013). The impact of work-life balance on women's career satisfaction and organisational commitment in Korea: Mediating effects of perceived supervisor support and career-related variables. Women in Management Review, 28(3), 186-203. doi: 10.1108/09649421311315782

Young, M. C. (2011). Organisational support and work-family conflict: A meta-analysis of U.S. studies. *Journal of Vocational Behavior, 79*(3), 617-626. doi: 10.1016/j.jvb.2011.05.005

Yusuf, Y. Y., Gunasekaran, A., Musa, A., El-Berishy, N. M., Abubakar, T., & Ambursa, H. M. (2013). The UK construction industry and the challenge of labour shortage. *International Journal of Managing Projects in Business, 6*(1), 106-124. doi: 10.1108/17538371311296885

Zaghini, F., Fiorini, F., Piredda, F., Fida, R., & Sili, A. (2020). Work-life balance and burnout among nurses: The moderating role of job demand-control-support model. Acta Bio Medica: Atenei Parmensis, 91(4), e2020162. doi: 10.23750/abm.v91i4.9566

Zhang, J., & Liao, J. (2015). Moderating effects of work-life balance practices on the relationship between work intensification and work-life conflict. Social Behavior and Personality: *An International Journal, 43*(3), 381-392. doi: 10.2224/sbp.2015.43.3.381

APPENDICES

Appendix A: Questionnaire

UNIVERSITY OF CAPE COAST

SCHOOL OF BUSINESS

DEPARTMENT OF MANAGEMENT

QUESTIONNAIRE

Dear Sir/Madam,

As a part of my Master of Philosophy (MPhil) programme at the School of Business, University of Cape Coast, I am working on a research project that aims at studying the effect of job demands on professionals working in the health service sector regarding the state of their Work Life Balance (WLB). For this purpose, a questionnaire containing various statements related to these aspects has been prepared. The first part of the questionnaire seeks to study the socio-demographic details of the respondents while the other parts contain statements to measure the WLB, Job demands.

Since you are an important member of one of the hospitals to be covered under this study, you have been randomly selected to participate in this survey. I sincerely request for your valuable participation in this study by filling up the present questionnaire, which is expected to take about 10 to 15 minutes of your time to complete. Your participation will make an important contribution to research regarding professional nurses just like you, who are managing multiple roles. If you are interested in receiving a summary of the results of this study upon its completion, please let me know the same. Your participation in the research is entirely voluntary. Please rest assured that your information would be kept strictly confidential and used for research purpose only. If you have any questions/doubts about this study, please feel free to contact me. I express my personal gratitude for your time and effort in completing this questionnaire.

SECTION A: Background Information

For each question, please tick mark the box ☐ with one answer that best describes your situation.

1. Your age *(In Years)?* …….
2. Your gender M☐e Fema☐
3. What is your highest qualification? Diplo☐ Bachelor's degree ☐
   Master's degree ☐ Above Master's degree ☐
4. What is your current job position?
   Midwife ☐
   Nurse ☐
   Paramedic ☐
5. What is your total work experience *(In Years)*? ……..

SECTION B: Job Demands

Please indicate against each job demand factors presented below whether it is available in your hospital and whether you are currently experiencing same. *If it is not available in your hospital, tick mark on the "strongly disagree" column and indicate the extent of the availability by tick from the strongly disagree to Strongly agree.* There are no right or wrong answers to the questions asked.

	Statements	**1**	**2**	**3**	**4**	**5**
1.	I feel exhausted at the end of the working day					
2.	I have to keep track of more than one process at once					
3.	I have to concentrate all the time to watch for things going wrong					
4.	My job required to deal with problems which are difficult to solve					
5.	I have to react quickly to prevent problems arising					
6.	I am exposed at work to high temperatures that make me perspire even when i am are not working?", "					
7.	I handle or have skin contact with chemical products or substances					
8.	My job involves lifting or moving people					
9.	My work requires undivided attention					

SECTION C: JOB RESOURCES

For the following statements, please indicate your level of agreement using the given scale by ticking the most appropriate cell against each statement that most accurately describes your position, opinion or situation *(tick one box only):*

1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neither Agree nor Disagree/Neutral (NAND), 4 = Agree (A), and 5 = Strongly Agree (SA).

	Work Engagement					
1.	My work environment is beautiful and visually attractive. My job inspires me					
2.	At my job, I feel strong and vigorous					
3.	I find the work that I do full of meaning and purpose					
4.	At my work, I feel bursting with energy					
5.	My work is my everything					

SECTION D: WORK-LIFE BALANCE

Please indicate your agreement with each of the following statements by putting a tick mark (√) in the desired boxes, wherever indicated, where, 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neither Agree nor Disagree (NAND), 4 = Agree (A), and 5 = Strongly Agree (SA).

	Statements	**1**	**2**	**3**	**4**	**5**
1.	Nowadays, I seem to enjoy every part of my life equally well					
2.	I am pretty good at keeping the different parts of my life in balance					
3.	Everything I do feels special to me, nothing stands out as more important or more valuable than anything else					
4.	I fine satisfaction in my work time, classes time, partner time, friend time, family time and leisure time					
5.	I am satisfied with my work-life balance, enjoying both roles'					
6.	I am satisfied with the opportunities I have to perform my job well and yet be able to perform home duties adequately.					

End of a Questionnaire.

Thank you for your time and participation!

Appendix B: Outer Loadings for Model 1

	Job Demand (JD)	Work Engagement (WENG)	Work life balance (WLB)
JD6	0.808		
JD7	0.716		
JD8	0.823		
JD9	0.759		
JDP1	0.841		
JDP2	0.771		
JDP3	0.804		
JDP4	0.740		
JDP5	0.739		
WE1		0.799	
WE2		0.776	
WE3		0.815	
WE4		0.798	
WE5		0.786	
WE6		0.829	
WE7		0.775	
WLB1			0.800
WLB2			0.818
WLB3			0.756
WLB4			0.863
WLB5			0.804
WLB6			0.831
WLB7			0.818