High Performance Work Systems and Employee Outcomes:

A Mediated Moderated Investigation into the Roles of

On-The-Job Embeddedness and Job-Based Psychological Ownership

By

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A thesis submitted in fulfilment of the requirement of degree of Doctor of

Philosophy in Management

Newcastle Business School

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May 2022

Statement of Originality

I hereby certify that the work embodied in the thesis is my own work, conducted under normal supervision. The thesis contains no material which has been accepted, or is being examined, for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository, subject to the provisions of the Copyright Act 1968 and any approved embargo.

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23 May 2022

Publications resulting from this research

Peer-reviewed conference proceedings

1. Thevisuthan, P., Malik, A., Boyle, B., Mitchell, R. (2019). A critical review of high performance work systems and job satisfaction: Do job- based psychological ownership and on-the-job embeddedness matter? 33rd Australian and New Zealand Academy of Management, Cairns, Australia.

Research symposium

1. Thevisuthan, P. (2019). A systematic review of high-performance work systems and employee intention to leave: The possible mechanisms of job-based psychological ownership and inclusive leadership. Presented at the 5th HDR Colloquium, Faculty of Business and Law, University of Newcastle, Australia.

Acknowledgements

First, I sincerely thank Almighty God, who granted me proper knowledge, strength, better health and grace that enabled me to conclude my PhD study.

The background to the writing of this thesis writing contained many ups and downs, struggles and challenges through which I had to pass. However, much love, kindness and support from everyone strengthened me to make my thesis submission possible today. Therefore, it is not enough for me to say just a single word of thanks to all who lent me much support and help during my entire PhD journey.

In particular, I express my heartfelt, sincere gratitude and thanks to my supervisors, Associate Professor Ashish Malik, Associate Professor Brendan Boyle and Professor Rebecca Mitchell, for their guidance, constructive feedback, advice and support throughout my PhD candidature. I feel particularly obliged to express my sincere thanks to my principal supervisor, Associate Professor Ashish Malik, for his immense knowledge and research experience sharing, patience, motivation, continuous understanding and support during every instance of my research. His constant guidance and encouragement, especially in the critical finishing stage, motivated me to undertake my thesis successfully. I also thank my co-supervisor, Associate Professor Brendan Boyle, who provided me with sound guidance, motivation and prompt feedback. I also offer sincere thanks to my co-supervisor, Professor Rebecca Mitchell, for her expertise and knowledge sharing, immediate advice, timely feedback and inspiration, all of which helped shape my research and thesis writing. I am honoured and happy to undertake this research under your supervision. Thank you, supervisors.

Dedication

I dedicate this thesis to my lovely parents, Yogamany Seenivasan and Seenivasan Kanapathipillai, who laid the educational foundation for me. I am who I am today because of their unconditional love and the many sacrifices they made for me.

Abstract

High performing and motivated employees are the cornerstones for any organisation to achieve a competitive advantage. In this vein, the extant literature claims that high-performance work systems (HPWS) play a crucial role in creating favourable employee outcomes, such as more satisfied and motivated employees and in diminishing turnover intention amongst employees. However, although HPWS has been found to produce favourable employee outcomes, how knowledge regarding HPWS affects employee outcomes is still limited, the so-called '*human resource management (HRM) black box*'. Moreover, employees' perceptions about HPWS and considerations regarding employee-level factors with the relationship of the HPWS-employee outcome are still limited. These research limitations lead to more calls for investigating HPWS at the individual level. In line with this research gap, this study proposes a mediated moderated conceptual framework that examines the role of employee-level mediating mechanisms of job-based psychological ownership and on-the-job embeddedness, and employee-level moderating mechanisms of employees' positive perceptions of inclusive leadership and the negative role of employee professional identity, between HPWS. This is examined in relation to employee outcomes: employee job satisfaction, motivation and intention to leave. Therefore, this paper aims to unlock the '*HRM black box*' by providing empirical evidence at the individual level to further understand the effects of HPWS on employee outcomes.

To examine the role of HPWS on employee outcomes, this study conducted a survey by adopting a positivist research design and issued self-administered questionnaires to the healthcare professionals who perform direct patient care in public hospitals in Sri Lanka. Before the main survey, a pilot survey was conducted to refine the survey questionnaires

further. After refining the pilot survey questionnaire, the main survey was conducted in two phases to avoid common method bias, as the data was collected entirely from one source. In the first phase, the first questionnaires that contained information on personal, independent, mediating, moderating and control variables were issued to the target sample. Then, after two weeks of issuing the first questionnaire, the second questionnaire containing information on the dependent variables was issued to the same respondents. Once all the questionnaires were collected, and after data cleansing, the data was analysed through structural equation techniques.

The study results reveal that, except for one hypothesis, all the other seventeen hypotheses are supported, as promised. The results show that employees' perceptions of HPWS significantly affect both employee job satisfaction and employee motivation. In contrast, they significantly negatively impact employee intention to leave. Moreover, the results find that all mediating hypotheses are supported for this study, indicating that both on-the-job embeddedness and job-based psychological ownership play fully mediating roles in strengthening the relationship between employees' perceptions of HPWS and employee outcomes. However, surprisingly, the moderating role of inclusive leadership is not supported. On the other hand, very interestingly, the empirical findings support a negative moderating effect of professional identity between on-the-job embeddedness and employee job satisfaction. Furthermore, the results also find that professional identity negatively impacts the mediating effect of on-the-job embeddedness on the relationship between employees' perceptions of HPWS and employee job satisfaction.

The study results contribute to strategic human resource management by unravelling the '*HRM black box*' between employees' perceptions of the HPWS-employee outcomes

path by introducing employee-level mediating and moderating mechanisms at the individual level. The study findings also contribute to managerial policymakers and practitioners, as well as healthcare policymakers and practitioners, by informing the importance of employees' perceptions of HPWS in producing favourable employee outcomes and by suggesting novel pathways to further improve employee outcomes through enhancing employee embeddedness and psychological ownership feelings towards their jobs. Finally, this study also informs managerial practitioners on the need to consider the negative side of employee professional identity and how it can affect employee outcomes.

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List of Abbreviations

HPWS	High Performance Work Systems
HR	Human Resource
SHRM	Strategic Human Resource Management
EJS	Employee Job Satisfaction
EM	Employee Motivation
EITL	Employee Intention to Leave
OTJE	On-the-Job Embeddedness
JBPO	Job-Based Psychological Ownership
PI	Professional Identity
IL	Inclusive Leadership
PLS-SEM	Partial Least Square - Structural Equation Modelling
CR	Composite Reliability
AVE	Average Variance Extracted
HTMT	Heterotrait-Monotrait Ratio
SPSS	Statistical Package for the Social Sciences

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Chapter 1

Introduction

1.1 Chapter Overview

This first chapter is structured as follows: a discussion of the background to the study; an outline of the research questions and objectives; an outline of the hypotheses developed for this study, along with the proposed conceptual framework; a discussion of the methodology adopted for this study; a presentation of the significance of this study; a summary of the study outcomes; and, finally, the structure of the thesis.

1.2 Background of the Study

Working with the notion that human resources are rare, inimitable and non-substitutable, employees are considered the most significant assets and critical priority for any organisation to reach organisational success and eventually generate a sustainable competitive advantage (Delery & Shaw, 2001). Previous research has shown that happy, satisfied and motivated employees are a productive and critical resource that favourably contributes to organisational outcomes (Appelbaum, Bailey, Berg, Kalleberg, & Bailey, 2000; Schleicher, Watt, & Greguras, 2004). Employees who have higher job satisfaction and self-motivation are more likely to be innovative, engaged and committed, and to produce high performance, ultimately leading to organisational success (Appelbaum et al., 2000; Kreye, 2016). Empirical studies have also proved that satisfied and motivated employees are more likely to reduce organisational absenteeism, employee departure and even actual turnover (Liu et al., 2005). On the other hand, the literature has also argued that, among employees, the development of an intention to leave an organisation incurs more significant consequences, including financial loss and decreased productivity (Huselid, 1995). The challenge of creating positive employee

outcomes in the workplace thus assumes an immense role in developing human capital and enhancing employee performance, generating a competitive advantage for organisations (Kaushik & Mukherjee, 2021). Conversely, it has also been argued that employees' negative feelings and attitudes towards organisations affect not only internal stakeholders and organisational operations, but also exert an impact on outside organisations, for example, customer service and care entities (Kloutsiniotis & Mihail, 2018).

Combining these literature insights further implies that developing favourable employee outcomes is crucial for organisations (Ang, Bartram, McNeil, Leggat, & Stanton, 2013; Kundu & Gahlawat, 2016). Among such outcomes, the extant literature places employee job satisfaction as a crucial attitudinal variable in the field of human resource management (HRM), as it is found to favourably affect employee attitudes and behaviours, and organisational outcomes (Fiona Edgar & Alan Geare, 2005; Fisher, 2003; Mihail & Kloutsiniotis, 2016). Furthermore, employee motivation is another factor that affects employee job performance and impacts employees in relation to their behaviour, productivity, high-quality organisational services and organisational competitive advantage (Appelbaum et al., 2000; Kreye, 2016). Moreover, scholars have also identified employee intention to leave as a critical behavioural outcome (Kehoe & Wright, 2013), as it is regarded as a primary sign of the actual turnover of employees (Cohen & Golan, 2007; Haque, Fernando, & Caputi, 2019). In this vein, this study considers the aforementioned three employee outcomes, employee job satisfaction, employee motivation and employee intention to leave, in examining how these outcomes can be further enhanced.

'How can organisations improve employee outcomes in the workplace?' is a popular research question that researchers are attempting to answer. Reviewing the available literature highlights

that the best human resource practices can improve employee behaviours, outcomes and performance (Boxall, 2012; Karatepe, 2013; Mao, Song, & Han, 2013). Although earlier scholarly work mainly used individual human resource (HR) practices to examine organisational and employee outcomes, the notion of 'system' subsequently came into place and it was argued that HR practices alone cannot create favourable employee and organisational outcomes (Boxall, 2012; Guest, 1987). Instead, there is a need to adopt a set or bundle of HR practices to create an advantage for firms. This concept was then conceptualised as 'high performance work systems (HPWS)' (Huselid, 1995), which has received increased attention from scholars for more than three decades (Appelbaum et al., 2000). HPWS is defined as "a group of separate but interconnected human resource practices designed to enhance employees' skills and effort" (Takeuchi et al., 2007, p. 1069). HPWS have also been described as an HRM system, but interrelated HRM practices that can be used to enhance employee abilities and motivation to perform well and offer opportunities for employees to exert discretionary effort (Appelbaum et al., 2000; Lepak, Liao, Chung, & Harden, 2006).

The literature argues that HPWS can be instrumental in developing favourable employee outcomes and behaviours, which in turn can achieve a competitive advantage (Fu, Ma, Bosak, & Flood, 2015). Furthermore, HPWS can develop an employee's ability, skills, motivation and involvement, and provide opportunities to participate in decision-making through empowerment, which helps employees to achieve high performance, be satisfied, be motivated and reduce their preoccupation with leaving organisations (Ananthram, Xerri, Teo, & Connell, 2018; Appelbaum et al., 2000). Previous studies also found a strong significant positive association between high performance work systems and employee job satisfaction (Ang et al., 2013; Boxall & Macky, 2009; García-Chas, Neira-Fontela, & Varela-Neira, 2016; Min, Zhu, & Bambacas, 2020; Takeuchi, Chen, & Lepak, 2009; Zhang, Akhtar, Bal, Zhang, & Talat, 2018), as well as employee motivation (Appelbaum et al., 2000; Boxall, Guthrie, & Paauwe,

2016; Wu & Lee, 2001). Furthermore, a number of studies confirm a strong negative relationship between a high performance work system and turnover intentions amongst employees (Jyoti, Rani, & Gandotra, 2015; Kundu & Gahlawat, 2016; Lam, Chen, & Takeuchi, 2009; Pajo, Coetzer, & Guenole, 2010). Moreover, numerous theories have previously been used to explain the HPWS-employee outcomes relationship, for example, Social Exchange Theory (Blau, 1964), Social Identity Theory, (Xu & Lv, 2018) and Self-determination Theory (Deci and Ryan, 2000). However, Ability-Motivation-Opportunity (AMO) theory has recently received much attention in HPWS studies, with the notion that HPWS provides avenues to affect employees' ability, motivation and opportunities to participate in decision-making. (Appelbaum et al., 2000; Jiang et al., 2012; Boxall and Macky, 2009). This study mainly focuses on the AMO theory.

Although previous studies affirm the links between HPWS and these outcomes, a better understanding of the mediating mechanisms influencing this relationship is still equivocal, and is commonly referred to as the '*HRM black box*' (Boxall et al., 2016; Ileana Petrescu & Simmons, 2008; Takeuchi et al., 2009) in the strategic human resource management (SHRM) field. Previous studies also quoted the fact that there is no general conceptual model that depicts the relationship between HPWS and employee outcomes; therefore, researchers attempted to unravel this *'HRM black box'* by introducing some mediating and moderating mechanisms. For example, the HPWS-employee job satisfaction link was previously examined through some mediators, such as a concern for employees' work climate (Takeuchi et al., 2009), future time perspective (Korff, Biemann, & Voelpel, 2017), employee engagement (Ang et al., 2013), procedural justice, and intrinsic motivation (García-Chas, Neira-Fontela, & Castro-Casal, 2014). Nevertheless, previous studies proposed limited mediating factors with which to further explain the association between HPWS and employee motivation. Positive affect is one of

those mediators (Mostafa, 2017). Furthermore, trust, motivation and organisational citizenship behaviour were studied as mediators between HPWS and employee intention to leave (Kundu & Gahlawat, 2016). In reviewing HPWS-employee outcomes, the literature suggests that there is a lack of study on the moderating role between these relationships. For instance, moral identity was examined as a moderator between the HPWS-unethical pro-active behaviour links (Xu & Lv, 2018).

In unravelling the '*HRM black box*', researchers have further stressed the prominence of introducing employee-level variables, rather than organisational factors that intervene in the HPWS-employee outcomes relationship (Wright & Nishii, 2007; Kehoe and Wright, 2013; Takeuchi et al., 2007). Scholars also argued that individual-level outcomes need to be achieved first, before attaining organisational (including firm, financial and market) outcomes (Dyer & Reeves, 1995). This emphasises that employee attitudes and outcomes need to be placed in the centre in HPWS studies (Guest, 2017; Paauwe, 2009). In better explaining the HPWS-employee outcomes relationship, it is also recommended that the researcher select the mediating variables that represent "holistic view an individual self" (Alfes, Shantz, Truss, & Soane, 2013). Moreover, researchers have also argued that employees' positive perceptions about HPWS cannot be neglected in organisations, as they first determine employee attitudinal HR outcomes, then contribute towards achieving behavioural HR outcomes, and subsequently impact organisational outcomes (Ang et al., 2013; Wright & Nishii, 2006). Previous studies also highlighted the fact that employee assessments of HR practices provide the best outcomes, such as organisational commitment and job satisfaction (Edgar & Geare, 2005; Macky & Boxall, 2008). However, a handful of previous studies examined the HPWS–individual-level outcomes relationship via individual level mediating, or moderating mechanisms from employees' perceptions (Kloutsiniotis and Mihail, 2017; Conteh & Yuan, 2021). Moreover

recently, there have been increasing calls for HPWS–employee outcomes studies to unpack the '*HRM black box*' by proposing employee level mediating and moderating mechanisms, via an employee-centred perspective (Ang et al., 2013; Boselie, Dietz, & Boon, 2005; Conteh & Yuan, 2021; García-Chas et al., 2014; Paauwe & Boselie, 2005)

Keeping in mind the above-identified research gaps, it is vital to propose potential individual-level mediators that intervene in the association between HPWS and employee outcomes links. A review of the literature suggests that embeddedness factors in the workplace are more likely to lead employees to stay and be satisfied and motivated in their jobs (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001; Mitchell & Lee, 2001). This input has enabled this study to propose on-the-job embeddedness as a possible mediating mechanism between employees' perceptions of HPWS and employee outcomes. Indeed, on-the-job embeddedness is an 'anti-withdrawal' construct that influences an employees' decision to stay with his or her job (Lee, Mitchell, Sablynski, Burton, & Holtom, 2004). It is suggested that HPWS leads to enhanced on-the-job embeddedness, creating a better person-job fit, improving links with people in organisations, and generating feelings of clearly perceived costs and benefits that result from leaving the organisation (Holtom & Inderrieden, 2006). Moreover, job embeddedness is negatively related to employee intention to leave (Holtom & O'Neill, 2004). However, there are mixed and inconsistent findings between the HPWS and job-embeddedness literature (Bergiel, Nguyen, Clenney, & Stephen Taylor, 2009; Tian, Cordery, & Gamble, 2016).

As with the role of on-the-job embeddedness, the literature also suggests that creating positive psychological feelings amongst employees towards their jobs develops favourable employee outcomes and behaviours (Mitchell & Lee, 2001; Van Dyne & Pierce, 2004). This study thus chooses the psychological phenomenon of job-based psychological ownership as another

mediating variable in explaining the HPWS-employee outcomes association. Job-based psychological ownership refers to employees' sense of possession of their job, even in the absence of financial or legal ownership (Pierce, Kostova, & Dirks, 2001). The literature places major emphasis on the significant role of employees' psychological ownership in creating favourable employee attitudes and organisational outcomes (Pierce et al., 2001; Van Linn & Pierce, 2004). Moreover, researchers argue that HR practices, such as providing opportunities to employees in decision-making, sharing information and some rewards schemes, for example, profit-sharing, help employees to enrich their feelings of psychological ownership in the workplace (Liu, Wang, Hui, & Lee, 2012; Pierce & Rodgers, 2004). However, job-based psychological ownership has not received much attention in HPWS studies, and only a limited number of studies have attempted to examine psychological ownership as a mediator between HPWS and employee outcomes; these studies primarily consider organisation-based psychological ownership (Xu & Lv, 2018). Thus, these arguments and gaps have enabled this study to introduce the potential mediators of on-the-job embeddedness and job-based psychological ownership to understand further the relationship between employees' perceptions of HPWS and the threefold employee outcomes.

Furthermore, while HPWS leads to increased job-based psychological ownership, this is likely to be dependent on several factors. In this regard, this study argues that employees' perceptions of inclusive leadership increase the likelihood of stimulating employee feelings of ownership towards their jobs. The literature clearly claims that positive leadership cultivates positive emotions and feelings in subordinates, subsequently helping to build stronger attachments with their work (Carmeli, Reiter-Palmon, & Ziv, 2010; Qingyan, Duanxu, & Xi, 2018). In addition, the literature suggests that inclusive leaders encourage and reinforce behaviours that help employees to be engaged in their jobs, which, turn, in helps employees to experience control

over their job tasks through a high sense of ownership towards their jobs (Randel et al., 2018). However, some studies found that interaction effects of supportive leadership played a negative role between HPWS and employees' outcomes such as job satisfaction and engagement (Hauff., Felfe & Klug, 2022). Thus, this study introduces inclusive leadership as a moderator in the relationship between employees' perceptions of HPWS and job-based psychological ownership.

Interestingly, this study also selects the moderating mechanism of professional identity as a negative role in the relationship between on-the-job embeddedness and employee job satisfaction. The extant literature on professional identity suggests that when employees have a high professional identity level, embeddedness factors (such as person-job fit, creating links with colleagues, and abandoning a desire to leave one's job) will not influence them. Scholars also argue that when employees are well-qualified and rely on their education and vocational training, they are more likely to search for other employment opportunities in a new job, even if they have some professional work experience in the new position, and subsequently reduce their engagement, commitment and job satisfaction in their current job (Raeder & Grote, 2007). Furthermore, this study examines the negative role of professional identity that moderates the mediating effect of on-the-job embeddedness in the relationship between employees' perceptions of HPWS and employee job satisfaction. It is suggested that organisational HPWS efforts do not positively influence employees who are higher in professional identity. In other words, if employees identify strongly with their profession, then the organisational influences are less relevant. The literature also suggests that high calibre professionals are more likely to find other employment opportunities very easily. As a result, they experience reduced commitment and satisfaction in their existing jobs (Baruch & Cohen, 2007). In a nutshell,

inclusive leadership and the negative role of professional identity have not been examined to test the above links in HRM studies.

Taken together, this study thus aims to fill the above research gaps in unlocking the '*HRM black box*', between the HPWS–employee outcomes relationship. By placing employees in the central position, this study attempts to examine the effects of employees' perceptions of HPWS on threefold employee outcomes (employee job satisfaction, employee motivation and employee intention to leave) by introducing two employee level mediating mechanisms (on-the-job embeddedness and job-based psychological ownership), and by proposing two employee level moderating mechanisms (inclusive leadership and professional identity). Mainly drawing on AMO theory, this study thus proposes an integrated conceptual framework to depict the relationships among the selected employee-level variables.

1.3 Research Questions and Objectives

Considering the above critical views of literature and the identified research gaps, the following research questions have been developed to achieve this study's objectives.

Overarching research question:

1. How do employees' perceptions of HPWS influence the following employee outcomes: employee job satisfaction, employee motivation and employee intention to leave?

Specific sub-research questions:

2. How do employees' perceptions of HPWS influence employee attitudes of on-the-job embeddedness and job-based psychological ownership?

3. How do both employee attitudes of on-the-job embeddedness and job-based psychological ownership influence employee outcomes of job satisfaction, motivation and intention to leave?

4. To what extent does on-the-job embeddedness mediate the relationship between the independent variable of employees' perceptions of HPWS and the dependent variables of employee outcomes, such as employee job satisfaction, employee motivation and employee intention to leave?

5. To what extent does job-based psychological ownership mediate the relationship between the independent variable of employees' perceptions of HPWS and the dependent variables of employee outcomes, such as employee job satisfaction, employee motivation and employee intention to leave?

6. To what extent does inclusive leadership positively moderate the relationship between employees' perceptions of HPWS and job-based psychological ownership?

7. To what extent does professional identity negatively moderate the relationship between on-the-job embeddedness and employee job satisfaction?

8. To what extent does professional identity negatively moderate the mediating effect of on-the-job embeddedness on the relationship between employees' perceptions of HPWS and employee job satisfaction?

Research Objectives

The main research aim of this thesis is to examine empirically the effects of employees' perceptions of HPWS on threefold individual-level employee outcomes, such as employee job satisfaction, employee motivation and employee intention to leave, in order to extend the understanding HPWS-employee outcomes relationships.

The second objective is to investigate how employees' perceptions of HPWS affect employee outcomes, such as employee job satisfaction, employee motivation and employee intention to leave their workplaces. Thus, this study proposes two employee-level mediating mechanisms,

such as job-based psychological ownership and on-the-job embeddedness, and, furthermore, two moderators, such as employees' perceptions of inclusive leadership and employee professional identity, in examining the relationship between HPWS and employee outcomes. The specific research objectives for this study are thus addressed below:

1. To investigate the extent to which on-the-job-embeddedness mediates the relationship between employees' perceptions of HPWS and the employee outcomes: job satisfaction, motivation and intention to leave.

2. To investigate the extent to which job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and the employee outcomes: employee job satisfaction, employee motivation and employee intention to leave.

3. To investigate the moderating effect of inclusive leadership between employees' perceptions of HPWS and job-based psychological ownership.

4. To investigate the moderating effect of professional identity between on-the-job embeddedness and employee job satisfaction.

5. To explore the negative moderating effect of professional identity on the mediated effect of on-the-job embeddedness in the relationship between employees' perceptions of HPWS and employee job satisfaction.

1.4 Hypotheses and Proposed Conceptual Framework for this Study

Based on the research gaps identified and the study's research objectives stated above, 18 hypotheses were formulated for this study. The summary of those hypotheses and the research questions addressing these hypotheses are presented in Table 1.1. In addition, the proposed conceptual framework is also presented in Figure 1.1.

Table 1. 1 Hypotheses and their linkages with Research Questions

Hypotheses Developed for this Study	Research Questions
Hypothesis 1 (a): Higher levels of employees' perceptions of HPWS are positively related to employee job satisfaction.	
Hypothesis 1 (b): Higher levels of employees' perceptions of HPWS are positively related to employee motivation.	1
Hypothesis 1 (c): Higher levels of employees' perceptions of HPWS are negatively related to employee intention to leave.	
Hypothesis 2: Higher levels of employees' perceptions of HPWS are positively related to on-the-job embeddedness.	2
Hypothesis 3: Higher levels of employees' perceptions of HPWS are positively related to job-based psychological ownership.	
Hypothesis 4: Higher levels of on-the-job embeddedness are positively related to employee job satisfaction.	
Hypothesis 5: Higher levels of on-the-job embeddedness are positively related to employee motivation.	
Hypothesis 6: Higher levels of on-the-job embeddedness are negatively related to employee intention to leave.	3
Hypothesis 7: Higher levels of job-based psychological ownership are positively related to employee job satisfaction.	
Hypothesis 8: Higher levels of job-based psychological ownership are positively related to employee motivation.	
Hypothesis 9: Higher levels of job-based psychological ownership are negatively related to employee intention to leave.	
Hypothesis 10: On-the-job embeddedness mediates the relationship between employees' perceptions of HPWS and employee job satisfaction.	
Hypothesis 11: On-the-job embeddedness mediates the relationship between employees' perceptions of HPWS and employee motivation.	4
Hypothesis 12: On-the-job embeddedness mediates the relationship between employees' perceptions of HPWS and employee intention to leave.	
Hypothesis 13: Job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and employee job satisfaction.	

Hypothesis 14: Job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and employee motivation.	5
Hypothesis 15: Job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and employee intention to leave.	
Hypothesis 16: Inclusive leadership moderates the relationship between HPWS and job-based psychological ownership.	6
Hypothesis 17: Professional identity negatively moderates the relationship between on-the-job embeddedness and employee job satisfaction.	7
Hypothesis 18: Professional identity negatively moderates the mediating effect of on-the-job embeddedness on the relationship between employees' perceptions of HPWS and employee job satisfaction.	8

Source: Compiled for this study

1.5 Research Methods

The research methodology guides the researchers on how the research should be carried out, how the data needs to be gathered and analysed, and how the results must be interpreted (Bell et al., 2018). Selecting suitable research methods solely depends on the study's aim, research questions and objectives. This study adopted a positivist research paradigm and a quantitative methodology. Adopting a quantitative methodology allows researchers to collect data from a large sample of respondents from various geographical places, and enables them to statistically test the study's hypotheses and generalise the study findings (Walsh, 2001; Cooper & Schindler, 2011; Bell et al., 2018). Given that, this study adopted a self-administered survey to gather more data, and offer a generalisation of the results.
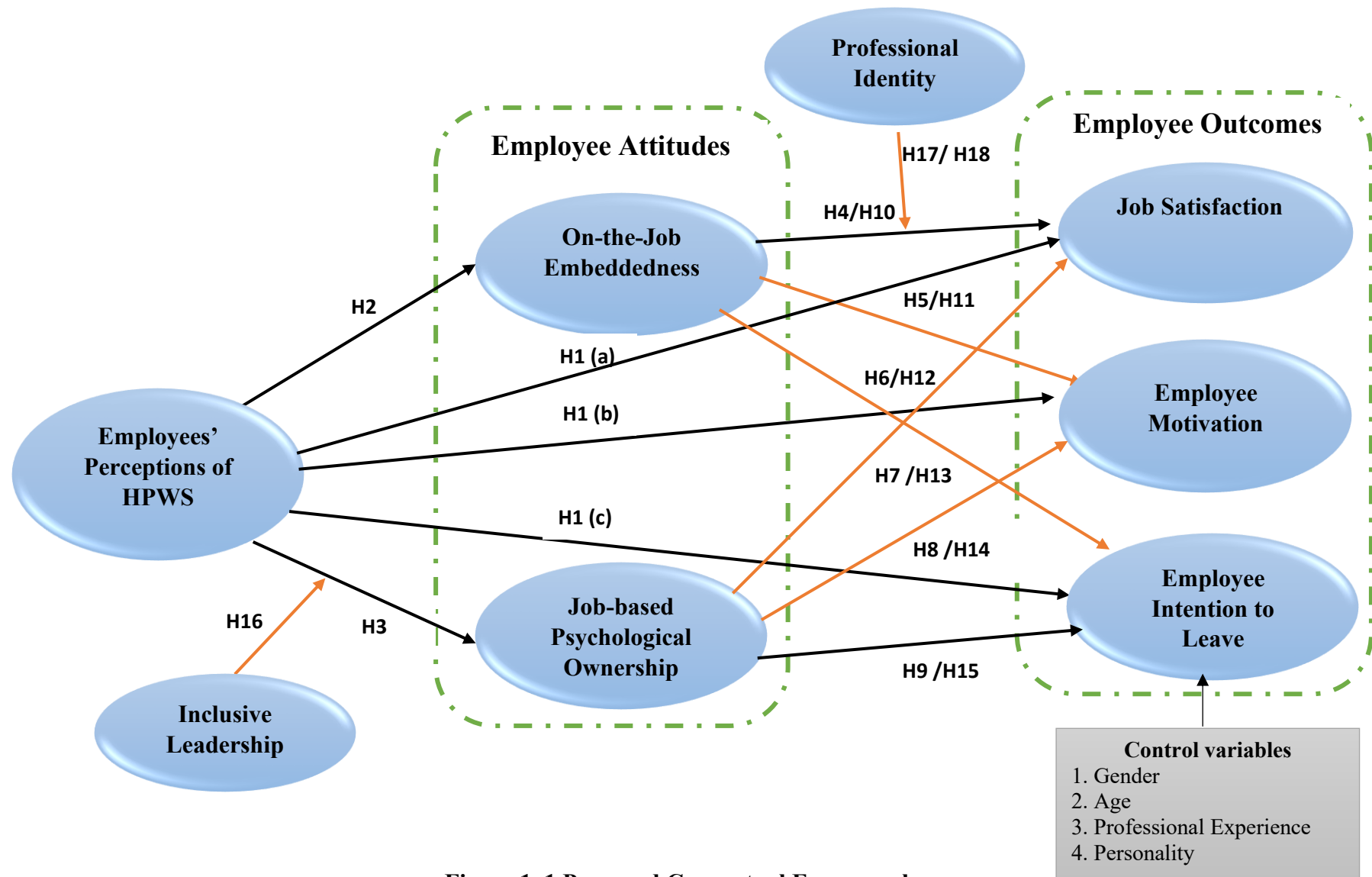
Figure 1. 1 Proposed Conceptual Framework

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This study was conducted using a cross-sectional survey with 400 healthcare professionals in public hospitals from three regions (Eastern, Western and Northern) in Sri Lanka. Healthcare professionals incorporating the role of direct patient care in a curative health setting were considered for the study, as these employees were knowledgeable, expert and suitable for testing the constructs of interest in this study. The study sample was calculated using Raosoft's sample size calculator (Raosoft, 2010) and the sample table by Krejcie and Morgan (1970), which led to determining the minimum sample as 400. This sample size is adequate and manageable in comprehensive analysis and generally acceptable for PLS-SEM analysis (Hair et al., 2011).

The questionnaire was developed by employing validated measures from the existing research literature, drawing from studies that have been published in top academic journals. The surveys for this study were undertaken in three phases. First, before the main survey, a pilot test was conducted. Then, after refining the survey instrument based on the pilot survey's outcomes, the main survey was conducted in two different phases to reduce the common method bias. The first phase questionnaire collected information on personal, independent, mediating, moderating and control variables, whereas the second phase questionnaire gathered information on dependent variables.

This study adopted various analytical approaches. First, the Statistical Package for Social Science (SPSS) and Excel software were used to conduct the preliminary data analysis and present descriptive statistics of study constructs. Once the appropriate quality of the whole data set was ensured, Partial Least Square-Structural Equation Modelling (PLS-SEM) was then employed to assess the study measurement model and predictive capabilities of the study model. The Smart-PLS was employed to work on a small sample effectively, and with a

complex model to predict the employee outcomes, the dependent constructs (Hair et al., 2011; Ringle et al., 2018). Finally, the hierarchical regression analysis and Macro Process of SPSS were used to examine the hypothesised relationships in the research model.

1.6 Significance of the Study

Although the notion of HPWS emerged in the 1980s, there is a great need to examine this concept in an organisational setting, as they have been proven to impact both employee and organisational level outcomes (Appelbaum et al., 2000; Kloutsiniotis & Mihail, 2020; Mao et al., 2013). However, the reviewed literature shows that HPWS have often studied with organisational outcomes, such as financial outcomes, organisational performance, organisational effectiveness, etc., where employee outcomes were merely regarded as mediators in those studies. (Ashiru, Erdil, & Oluwajana, 2022; Jiang & Liu, 2015; Jiang, Lepak, Hu, & Baer, 2012; Zhang & Morris, 2014). Moreover, the limited number of studies at the employee level stresses the need to call for more research that examines how HPWS affect employee outcomes (García-Chas, Neira-Fontela, & Castro-Casal, 2014; Paauwe & Boselie, 2005; Wright & Nishii, 2006; Boselie et al., 2005). In other words, it is essential to find out through which mechanisms HPWS can improve employee attitudes and outcomes in the workplace, at the individual level from the employees' perceptions and views, in unpacking the *'HRM black box'* issue in organisations (Wright & Nishii, 2007; Kehoe & Wright, 2013; Takeuchi et al., 2007).

By considering these research gaps, this study attempts to unravel this *'HRM black box'* between HPWS and the employee outcomes relationship and offer empirical evidence for the role of employees' perceptions of HPWS in improving employee attitudes, and subsequently enhancing employee outcomes. This study thus develops an integrated conceptual framework,

at the employee level, for examining the effects of employees' perceptions of HPWS and employee outcomes (employee job satisfaction, employee motivation and employee intention to leave) through employee level mediators (on-the-job embeddedness and job-based psychological ownership) and employee level moderators (employees' perceptions of inclusive leadership and professional identity), by drawing on AMO theory and other appropriate theories. This integrated conceptual framework, located entirely at the individual level, offers a dynamic mechanism that further explains how employees' perceptions of HPWS create significant effects on employee attitudes and subsequent employee outcomes.

Moreover, this study contributes to HRM literature in more ways. First, it contributes to the theory of unblocking the '*HRM black box*' path between HPWS and employee outcomes, located entirely at the individual level. Second, this study further explains how on-the-job embeddedness and job-based psychological ownership may be possible mediators that further strengthen and enhance the relationship between HPWS and employee outcomes. Third, this study provides more understanding of this theory by investigating the individual-level moderating mechanism of inclusive leadership in stimulating employees' psychological ownership towards their job. Moreover, investigating the negative moderating role of employee professional identity between the HPWS- on-the-job embeddedness and the employee job satisfaction path provides further empirical evidence of how employees' professional identity influences employee outcomes. Finally, in a single framework and using empirical evidence, the proposed model provides more insights into the theory, explaining employees' perceptions of HPWS and how it is linked to enhancing employee attitudes and, subsequently, employee outcomes.

The findings of this study also provide insights for practitioners. First, it contributes to the practice of HRM in recommending that management practitioners foster employees' feelings of ownership and embeddedness in their jobs. Second, the proposed study considers practical implications for HRM in healthcare for informing policymakers, in order to revisit and possibly adapt HRM practices by incorporating employees' perceptions to enhance employee outcomes. Third, the implications of this provide more insights for healthcare policymakers in Sri Lanka by informing them of the nature and impact of psychological ownership and on-the-job embeddedness for enhancing employee outcomes. Finally, this study provides further input for policymakers by informing them of the dark side of employees' professional identity, and how they can motivate and retain their professionals in the healthcare sector. Therefore, both in a health care setting and more broadly, the insights gained in this study can provide clear, practical contributions to management practice.

1.7 A Summary of Research Outcomes

Before conducting the SEM analysis, a preliminary data analysis was conducted using SPSS 27.0 and Excel to ensure the data were of appropriate quality and free of errors. In this phase, missing values and suspicious response patterns in some questionnaires were identified, and the decision was made to exclude them from the data analysis, because they impacted the quality of the data analysis process. The normal distribution of data was also confirmed for this study. The demographic profiles of the respondents show that most of these participants were: nursing officers, female, and aged between 31-40 years. Furthermore, the majority of participants had 2-5 years' experience in their professions, both in current hospitals and in their current jobs.

Following this preliminary analysis, SEM analysis was conducted in two phases: measurement and the structural model. First, the measurement model assessment was undertaken to ensure the quality of construct measures in terms of reliability and validity. Accordingly, the reliability and validity tests were performed, and this confirmed that they had achieved the satisfactory levels required to run the measurement models further. Second, the structural model was assessed using three statistical analysis techniques: SPSS, Smart-PLS and the SPSS Macro Process. The results showed that employees' perceptions of HPWS have a positive significant impact on both employee job satisfaction and employee motivation, while they have a significantly negative impact on employee intention to leave. The findings also confirmed that both of the employee attitudes (on-the-job embeddedness and job-based psychological ownership) also have positive significant effects on both employee job satisfaction and employee motivation, and have a negative significant impact on employee intention to leave. Moreover, all mediating hypotheses were supported for this study, indicating that both on-the-job embeddedness and job-based psychological ownership play fully mediating roles in strengthening the relationship between employees' perceptions of HPWS and employee outcomes.

Surprisingly, the results indicate that inclusive leadership is not found to be an effective moderator between employees' perceptions of HPWS and job-based psychological ownership. On the other hand, the empirical findings support a negative moderating effect of professional identity between on-the-job embeddedness and employee job satisfaction. Furthermore, the results demonstrate that professional identity negatively impacts the mediating effect of on-the-job embeddedness on the relationship between employees' perceptions of HPWS and employee job satisfaction. All in all, except for the moderating role of inclusive leadership, this study offers empirical evidence that supports all of the other hypotheses. Thus, this study

suggests implementing a version of HPWS that incorporates the employees' views and perceptions leads to enhanced employee attitudes, such as developing higher levels of on-the-job embeddedness and job-based psychological ownership, which in turn enriches employee outcomes in the workplace.

1.8 Structure of the Thesis

This thesis is structured into five chapters. Chapter 1 presents the background of the study and then articulates the research questions and objectives based on the existing literature theory and identified literature gaps. The study hypotheses and the proposed conceptual framework are then figured. Following a discussion of the significance of this study, the research methods adopted for this study are discussed. The chapter finally concludes with the thesis structure.

Chapter 2 reviews the extant literature and theoretical foundations of HPWS and employee outcomes that are related to supporting and articulating the research gaps of this study. First, this review presents the theoretical background on HPWS, including the need to centralise the HPWS studies from employee perceptions, and how HPWS is linked to AMO theory. Furthermore, the theoretical and multiple empirical findings are discussed in terms of their support for the HPWS and threefold employee outcomes (employee job satisfaction, employee motivation and employee intention to leave), as well as employee attitudes (on-the-job embeddedness and job-based psychological ownership). The background and previous empirical evidences of mediating mechanisms of this study (on-the-job embeddedness and job-based psychological ownership) are then presented. Moreover, this chapter explores the literature on the moderating roles of inclusive leadership and professional identity in HPWS studies. The identified gaps in this literature review are also presented. Finally, this chapter

discusses the proposed hypotheses and the development of a conceptual framework for advancing the understanding of the linkages between HPWS and employee outcomes.

Chapter 3 explains the research methodology that has been employed for this study. It outlines the research paradigm, research design, study population and sampling method. Further, this chapter presents the data collection method, measures and instrument, and ethical considerations and the approval thereof, and the limitations of this study.

Chapter 4 presents the results and findings of this study. Following the findings from the preliminary analysis, the demographic profile of respondents and descriptive statistics are presented. In the final stage, the structural and measurement model evaluations are undertaken. The hypotheses results are also presented in this chapter.

Chapter 5 summarises the findings of this study, in which the research questions are answered. The study's contributions to theory and practice are presented. The limitations of this study are also presented in this chapter. Finally, it discusses the future research directions.

Chapter 2

Review of Literature and Hypotheses Development

2.1 Introduction

This chapter reviews scholarly literature regarding the HPWS-employee outcomes relationship. The aims of this chapter are twofold. First, this chapter identifies the need for further HPWS studies at an employee level, and articulates the research gaps to introduce the employee-level mediators and moderators between the HPWS and employee outcomes relationship. The second aim of this chapter is to form hypotheses drawn from theoretical underpinnings and existing literature gaps, and thereby develop the integrated conceptual framework of this study.

For this purpose, Section 2.2 presents the theoretical background and evolution of the HPWS concept, defines HPWS and discusses the links between the AMO theory and HPWS. This section also justifies examining HPWS from the employees' perspective. Section 2.3 of this chapter provides a theoretical background for three significant employee outcomes: employee job satisfaction, employee motivation and employee intention to leave. Section 2.4 elaborates on the empirical evidence that supports the associations between HPWS and employee outcomes, as mentioned above. The two employee attitudes are considered to be the mediating mechanisms of this research, namely on-the-job embeddedness and job-based psychological ownership, which is then developed in Section 2.5, along with its background and previous empirical evidence. Section 2.6 explores the moderating roles of professional identity and inclusive leadership in HPWS studies, and their theoretical foundation and past scholarly works. The identified gaps of this literature review are then presented in this chapter, as they are likely to provide a strong theoretical foundation for the study's contributions. This chapter

concludes with the development of each hypothesis for this study by providing strong theoretical and empirical streams of evidence, and then presents the proposed conceptual framework.

2.2 Evolution of High-Performance Work Systems

During the last three decades, researchers have highlighted the use of HPWS in organisations, as the implementation of a set of, or bundles of, HRM practices that have been proven to produce favourable employee and organisational outcomes in a wide range of contexts (Ang et al., 2013; Appelbaum et al., 2000; Boselie, 2010; Boselie et al., 2005; Boxall, 2012). The notion of HPWS originated from the field of strategic human resource management (SHRM) (Kaushik & Mukherjee, 2021). Since the 1980s, different firms from diverse countries have started to use work systems to enhance the operational efficiency, performance and productivity of employees (Boxall, 2012; Kaushik & Mukherjee, 2021). For example, Japan has used lean production systems, and the United States has utilised advanced forms of work systems in order to increase the competitiveness of manufacturing firms (Boxall, 2012; Kaushik & Mukherjee, 2021).

Before the HPWS paradigm was established, mainstream HRM literature focused on how best HR practices improved organisational and employee performance. However, it was argued that best HR practices were not enough to produce organisational benefits. More than that, there was a need for alignment between these HR practices and organisational strategy (Guest, 1987). In other words, the concept of 'system thinking' has emerged in HRM, whereby HR practices need to be combined then operated as a system (Boxall, 2012; Combs, Liu, Hall, & Ketchen, 2006; Guest, 1987).

The mid to late 1980s saw the emergence of strategic approaches to HRM practices such that the line of sight between the HRM-performance links could be refined. This stream of research focused on selecting a bundle of high performing work practices (HPWP) that enhance performance (Huselid, 1995). Extending this line of thinking, and applying the concepts of strategic alignment and fit, a more integrated and systems-focused approach of high performing work systems (HPWS) was advanced. As the term suggests, HPWS is a system of integrated HRM practices that are designed and implemented to create synergistic effects in the performance of organisations, focusing on the HRM goals of cost-effectiveness, flexibility, agility and collaboration to deliver sustained levels of high performance (Appelbaum et al., 2000). There is considerable variety in the literature regarding the way that HPWS have been conceptualised, for example, high involvement work systems (which focus more on power-autonomy, information sharing, skills development and rewards) (Lawler, 1986), high commitment management (that focuses more on developing systems for improving employee attitudes and behaviours, that increase their commitment towards the organisation) (Walton, 1985), and so on.

The literature emphasises that the creation of a bundle of HR practices, rather than individual HR practices, is considered to be a principal feature in HPWS research (Beltrán-Martín & Bou-Llusar, 2018). Delery (1998) has argued that HR practices should be combined to form coherent systems. Moreover, other researchers also claim that, when individual HRM practices are gathered in coherent bundles, they are able to generate a synergistic or combined effect, as this yields the value greater than the sum of each HRM practice (Macduffie, 1995; Delery and Shaw 2001). Moreover, researchers argue that both internal and external alignments need to be achieved to create HPWS. Internal alignment occurs among the HR practices, whereas external alignment can occur when the HR practices are aligned with organisational strategy (Boxall,

2012; Huselid & Becker, 1995; Kaushik & Mukherjee, 2021). Thus, the HRM practices in HPWS work together to engender a synergistic or mutually supportive impact, in order to enhance organisational performance and HPWS effectiveness (Appelbaum et al., 2000; Becker & Gerhart, 1996).

Previous literature claims that HPWS can be a good weapon for fostering favourable employee attitudes, behaviours and outcomes, which in turn can attain an organisational competitive advantage (Fu, Ma, Bosak, & Flood, 2015). The literature argues that employee performance can be enhanced through developing the ability, skills and motivation of employees, which in turn can escalate firm performance (Huselid, 1995; Karadas & Karatepe, 2018). The literature also argues that HPWS have the ability to positively influence an employee's ability, skills and, motivation, and provide opportunities to participate in decision-making through empowerment, which help employees to perform at a high level, experience satisfaction, discover motivation, reduce any ideas of leaving organisations, and, ultimately, achieve organisational goals (Ananthram et al., 2018; Appelbaum et al., 2000).

Reviewing the literature further confirms that early HPWS have massively studied with organisational outcomes, for example, operational and financial outcomes (Jiang, Lepak, Hu, & Baer, 2012), organisational effectiveness (Jiang & Liu, 2015) and organisational performance (Ashiru, Erdil, & Oluwajana, 2022; Zhang & Morris, 2014). In these previous studies, employee outcomes were merely regarded as mediators between HPWS-organisational outcomes; for example, those mediators could be human capital and employee motivation (Jiang et al., 2012), social capital (Jiang & Liu, 2015), employee outcomes (Zhang & Morris, 2014), employee innovation or employee voice (Ashiru et al., 2022). However, recent research has increasingly examined HPWS at the individual level. For instance, HPWS have been

studied with reference to employee job satisfaction, organisational commitment, employee citizenship behaviours, etc. Although it has been argued that HPWS produce favourable employee outcomes in the workplace, on the other hand, some studies found that HPWS can lead to some detrimental effects upon employees, for instance, job strain (Ramsay, Scholarios, & Harley, 2000).

HPWS have been studied in diverse contexts, for example: manufacturing (Appelbaum et al., 2000); public companies (Zhang, Di Fan, & Zhu, 2014); indigenous firms (Min et al., 2020); the banking sector (Abbasi, Shabbir, Abbas, & Tahir, 2021); the health care sector (Ang et al., 2013; Kloutsiniotis & Mihail, 2020); the hospitality industry (Murphy, Torres, Ingram, & Hutchinson, 2018); and even multi-industries (Van De Voorde & Beijer, 2015). However extant literature points out the lack of HPWS studies at the employee level in the healthcare sector. For example, Ang et al. (2013) conducted a survey among Australian hospital employees and managers, and found that employees' perceived that HPWS were only leads to promoting a greater level of employee engagement, satisfaction and a lower level of intention to leave. Another study conducted among nurses and doctors of Greek regional hospitals, found that HPWS have had a positive, significant impact on employee outcomes, such as job satisfaction, job engagement and affective commitment, and had a negative impact on employee intention to leave hospitals. (Kloutsiniotis & Mihail, 2017).

2.2.1 Defining High Performance Work Systems

Authors have argued that the definition for HPWS is under challenge, as there is little agreement among researchers by which to define it (Jiang et al., 2012; Macky & Boxall, 2008). However, HPWS have been described as a set of HRM practices that enhance employee ability,

motivation and involvement (Lepak, Liao, Chung, & Harden, 2006). HPWS is defined as "a group of separate but interconnected human resource practices designed to enhance employees' skills and effort" (Takeuchi et al., 2007, p. 1069). Moreover, Appelbaum et al. (2000) have labelled HPWS as HRM systems that enhance employee abilities and motivation to perform well, and offer opportunities for employees to exert discretionary effort.

Although, HPWS are considered to be a bundle of HRM practices in much HPWS research, there remain inconsistencies in choosing a particular HRM bundle. (Boselie et al., 2005). In other words, the question of which HRM practices need to be included in a typical bundle is still a researchable area. Researchers argue that selecting the right bundle of HR practices is a necessary condition for enhancing organisational and employee performance (Macduffie, 1995), and this solely depends on the business type and firm strategy (Boxall, 2012; Han, Kang, Oh, Kehoe, & Lepak, 2019). Furthermore, these bundles need to: be linked together, possess international consistency among them, and be understood and experienced by employees (Kaushik & Mukherjee, 2021). Previous studies have used numerous theories to conceptualise HPWS-outcomes relationships, for example, social exchange theory (Xu & Lv, 2018) and social identity theory. Nonetheless, the AMO framework is one of the leading models for best conceptualising the HPWS and outcomes linkage (Appelbaum et al., 2000). Boselie et al. (2005) and Paauwe and Boselie (2005) confirm the increased use of AMO by researchers. We thus follow the AMO model in conceptualising HPWS and the three aforementioned employee outcomes. The next section of this research will present the evolution of the AMO theory and how it is likened to HPWS.

2.2.2 Ability-Motivation-Opportunity (AMO) Theory and HPWS

The genesis of the AMO framework can be traced back to earlier behavioural science theories and principles emanating, for example, from the work by Vroom (1964), who first advanced the formula describing how the interactive effects between ability (the selection and training of people) and motivation (intrinsic or extrinsic) to achieve performance, notionally expressed as P = *F (Ability x Motivation)*. Through certain work practices, the right set of individuals can be selected and developed, then further motivated to develop greater levels of organisational commitment. This idea was popularised by Blumberg and Pringle (1982), who also highlighted the limitation of the above performance approach, as it failed to explain the external environmental factors affecting performance. To this end, they added a third element, 'opportunity' to perform (Blumberg & Pringle, 1982), to achieve high performance in a work environment. Subsequently, Bailey (1993) argued that, for realising employees' discretionary effort, employees must have the necessary skills, be appropriately motivated, and be provided with the opportunity to perform by the employing organisation. Appelbaum et al. (2000) hereinafter referred to this as the AMO (ability, motivation and opportunity) rubric.

However, the main challenge is how organisations can get more AMO from their employees to achieve performance outcomes of increased productivity, creativity and discretionary effort. The focus, therefore, is on selecting a system (HPWS) and a set of HRM practices (HPWP) that generate the highest levels of AMO for employees in an organisation (Kaufman, 2015). In other words, HPWS naturally dovetails with AMO, as it focuses on the individual elements of HRM practices that can help increase ability, motivation and the opportunity to perform well (Boxall, 2013).

According to this AMO model, HRM practices are classified as: ability, motivation, and opportunity-enhancing practices. The AMO model elaborates how HR practices can affect employee performance through employees' abilities, motivation and opportunities. Firstly, ability-enhancing practices are used to enhance employees' knowledge, skills and abilities in organisations, and these practices often include recruitment, selection, training and socialisation (Jiang et al., 2012; Wright & Kehoe, 2008). It is found that ability-enhancing practices operate as an effective mechanism through which HPWS enhances employees' task and contextual performance (Edgar, Zhang & Blaker, 2019). Second, motivation-enhancing practices lead to enhanced employees' task-related and discretionary behaviours, and to minimised counterproductive behaviours (Wright & Kehoe, 2008, p. 14). Incentive pay, compensation, performance management, promotion, career development and job security are all considered to motivate employees in the workplace (Jiang et al., 2012; Wright & Kehoe, 2008). Finally, investing in opportunity-enhancing practices allows employees to participate in decision-making through practices such as information sharing, suggestion systems, work teams, employee involvement and formal grievance and complaint processes (Jiang et al., 2012; Wright & Kehoe, 2008).

The AMO theory has recently received much attention in HPWS studies, with the notion that HPWS provides paths to influence employees' ability, motivation and opportunities to participate in decision-making, and thereby positively contributes to employee and organisational outcomes (Appelbaum et al., 2000; Jiang et al., 2012; Boxall and Macky, 2009). A very recent study also used the AMO theory to conceptualise HPWS, and found that developing employees' ability to perform, enhancing employee motivation, and providing opportunities to participate serve as a best instrument in boosting employee service performance (Rani, Rahman & Yusak, 2021). It is found that HPWS can develop an

employee's ability, skills, motivation and involvement, and provide opportunities to participate in decision-making through empowerment, which helps them to achieve high performance, experience satisfaction, discover motivation, and reduce their preoccupation with leaving organisations (Ananthram, Xerri, Teo, & Connell, 2018; Appelbaum et al., 2000). Hence, our study considers the AMO theory in conceptualising HPWS and employee outcomes.

2.2.3 Employees' Perceptions of HPWS

HPWS literature is still criticised because of its greater focus on management-centric point than on employee-centric point (Boselie et al., 2005). Researchers have argued that employee perceptions about HPWS cannot be neglected in organisations, as they determine their attitudes and behaviours, and impact organisational outcomes (Ang et al., 2013; Choi, 2014). It is argued that HPWS render favourable employee outcomes, such as job satisfaction, commitment and reducing the feeling of voluntary turnover, only when the implemented HRM practices are similar to employees' perceived practices (Ang et al., 2013). One study proved that high performance work systems lead to higher employee outcomes, such as engagement, job satisfaction, affective commitment and lower employee intention to leave, only when employees experience similar HPWS practices to those that are implemented by the healthcare organisation of Australia (Ang et al., 2013). Empirical findings have thus emphasised the need to place HPWS research at the employee level. This is because each employee perceives the same organisational practices differently. Wright and Nishii (2006) also claim that employee perceptions about HRM practices are different from the actual practices implemented. Scholars also highlight the importance of situating employees in the centre when implementing any HPWS practices. It is highly recommended that the implemented HPWS practices be identified, elucidated and perceived by employees, as they affect employee outcomes, attitudes and behaviours (Boxall and Purcell 2008; Macky and Boxall, Ang et al., 2013). However,

analysing the literature confirms that only a handful of studies examined the HPWS from the employees' perspectives.

2.3 Employee Outcomes

Employee outcomes are considered to be critical variables that help to elucidate the inexplicit HPWS-performance linkage in unravelling the so-labelled '*HRM block box*' (Boselie et al., 2005). However, most studies have been devoted to examining the HPWS with organisational outcomes. This is proved by a meta-analysis of 104 published articles where HPWS were extensively examined along with organisational performance in terms of financial performance, outputs, quality and productivity (Boselie et al., 2005). Nevertheless, scholars argue that individual-level outcomes need to be achieved first, before attaining overall organisational outcomes, such as specific organisational, financial and market outcomes (Dyer & Reeves, 1995). Thus, this logic emphasises that employee outcomes need to be placed at the central position in the HPWS-performance causal chain. In accordance with this research need, our study looks at three-fold employee outcomes, employee job satisfaction, employee motivation and employee intention to leave, in a holistic way, because it is acknowledged that satisfied and motivated employees are more productive and more motivated to put in extra effort to achieve organisational goals, while reducing feelings of wanting to leaving the current organisations (Ananthram et al., 2018; Safavi Homayoun, 2018).

2.3.1 Employee Job Satisfaction

Job satisfaction is one of the most researched and crucial attitudinal variables in the field of HRM and organisational behaviour. It is considered to be at the heart of HPWS, as it favourably affects employee attitudes and behaviours and organisational outcomes (Edgar & Geare, 2005; Fisher, 2003; Mihail & Kloutsiniotis, 2016). Job satisfaction is defined as "a pleasurable or

positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1300). It is also viewed as the degree to which employees feel positively or negatively about the different aspects or facets of their jobs (Fisher, 2003; Locke, 1976; Spector, 1997).

Many researchers have posited job satisfaction as a key predictor of employee withdrawal outcomes such as absenteeism, turnover intentions and the actual turnover of employees (A. Cohen & Golan, 2007). More particularly, authors have claimed that cognitive job satisfaction has a stronger negative effect on turnover than affective job satisfaction (Huang, Chen, Liu, & Zhou, 2017). It is also argued that employees who are dissatisfied with their jobs tend to be less committed, and think more seriously of quitting the organisation (Brown, Hyatt, & Benson, 2010).

Job satisfaction can be measured either using a single global rating or different facets of job satisfaction. Accordingly, the global construct of job satisfaction can also be viewed as employees' general feelings and satisfaction about their jobs, while the different facets of job satisfaction are regarded as employees' evaluations of different aspects of jobs (Schmidt, 2007). However, a considerable number of studies measured job satisfaction using a single global rating rather considering satisfaction with different facets of jobs, including pay, promotions, the job itself, supervisors and coworkers (Kangas, Kee, & McKee-Waddle, 1999) In line with the global construct, our study conceptualises employees' general satisfaction towards their current jobs.

2.3.2 Employee Motivation

Employee motivation is considered to be an important construct since it directly determines employee job performance. Scholars have placed more emphasis on employee motivation,

because it not only affects employee job performance, but also impacts on employee behaviour, productivity, organisational high-quality services and, finally, organisational competitive advantage (Appelbaum et al., 2000; Kreye, 2016). Thus, it is essential to motivate employees in organisations, and so researchers have tried to determine the factors that might affect employee motivation. As a result, two studies found five consistent factors for employee motivation: high wages, promotion and growth in the organisation, job security, interesting work, and full appreciation of work done. These are the most effective motivating factors (Azizul Islam & Deegan, 2008; Wiley, 1997). Moreover, good working conditions were also recognised as an employee motiving factor (Islam, 2008). A recent study also found that the fulfilling nature of work and skill development is a central motivation factor (Kreye, 2016). However, there is still a need to find out the motivating factors for employees to perform their jobs well (Ciobanu, Androniceanu, & Lazaroiu, 2019; Wiley, 1997).

2.3.3 Employee Intention to Leave

Employee intention to leave is an important behavioural outcome (Kehoe & Wright, 2013). Although it is not the actual outcome, it is regarded as a primary sign for the actual turnover of employees (A. Cohen & Golan, 2007; Haque et al., 2019) Employee intention to leave refers to employees' behavioural intentions and deliberate desire to leave their organisations (G. Cohen, Blake, & Goodman, 2016; Griffeth, Hom, & Gaertner, 2000). Researchers have identified the intention to leave as a withdrawal cognition process involving employees' inclination to resign from jobs, look for alternative jobs and, finally, leave an organisation (Dechawatanapaisal, 2018). Job satisfaction is considered to be a key antecedent for employee intention to leave (San Park & Hyun Kim, 2009). Beyond this, scholars have identified a number of factors that could affect employees' turnover intentions: workplace justice (Chin et al., 2019), work engagement (Memon et al., 2019; Memon Mumtaz, 2018), affective and

normative commitment (Cohen, 2007; Ghosh et al., 2013), intrinsic motivation (Dysvik, 2010), leadership behaviours (transformational and transactional (Mittal, 2016), adequate organisational socialisation (Bigliardi, 2005), distributive justice, trust in one's organisation, and job security (Wong & Wong, 2017).

2.4 HPWS and Employee Outcomes

The linkage between HPWS and employee-level outcomes is regarded as a central position in the HPWS-performance casual chain, as this directly affects organisational outcomes such as organisational performance. However, authors argue that employee-level research is still relatively scarce or neglected, and employee outcomes are often studied as mediating variables between HPWS and organisational outcomes (Dechawatanapaisal, 2018; Paauwe & Boselie, 2005). At the same time, the literature is lacking in terms of properly evaluating the path that could shape HPWS and employee outcomes, as many studies have examined the HPWS with macro-level factors, such as organisational performance and profits (Boon, Den Hartog, Boselie, & Paauwe, 2011). Hermans and Ulrich (2020) found that a set of symbolic HR function actions leads to advancing HR's influence on strategic decision-making compared to other functions.

HPWS have been found to produce positive employee outcomes (Macky & Boxall, 2007). Social exchange theory is often employed for conceptualising the impact of HPWS on employee outcomes and behaviours (Aryee, Walumbwa, Seidu, & Otaye, 2012). However, recently, researchers have claimed that the AMO theory could be the best way to conceptualise HPWS and employee outcomes. Researchers have argued that ability-enhancing practices increase employees' knowledge, skills and abilities (Wright & Kehoe, 2008), so that skilled employees are more likely to be satisfied with their jobs and exert discretionary effort

(Appelbaum et al., 2000). Similarly, motivation-enhancing HR practices and opportunity-enhancing HR practices are more likely to foster employee motivation (Jiang et al., 2012); whereas ability, motivation and opportunity-enhancing practices are negatively associated with an intention to leave the organisation (Lam et al., 2009). However, one recent study found that opportunity-enhancing practices, such as participative work design and decision-making, are less effective in high-power-distance cultures (Dastmalchian et al., 2020). The above logic and focus of the employee-centred research has enabled us to conceptualise the effects of employee perceptions of HPWS upon three employee-level outcomes, employee job satisfaction, employee motivation and employee intention to leave, using employee-level mediators and moderators in an integrated way.

2.4.1 HPWS and Employee Job Satisfaction

A favourable relationship between HPWS and employee job satisfaction is considered to be central to achieving organisational success (Appelbaum et al., 2000; Jiang et al., 2012). Several studies have determined the direct, positive relationship between HPWS and job satisfaction (Ananthram, et al., 2018; Mihail & Kloutsiniotis, 2016; Takeuchi et al., 2009; Zhang, Akhtar, Bal, Zhang, & Talat, 2018; Boxall and Macky, 2009; Ang et al., 2003; Fabi, Lacoursière, & Raymond, 2015; García-Chas, Neira-Fontela, & Varela-Neira, 2016; Kloutsiniotis & Mihail, 2017; Macky & Boxall, 2007; Ollo-López, Bayo-Moriones, & Larraza-Kintana, 2016). Although the AMO framework is well-supported for building the relationship between HPWS and job satisfaction, only a few studies have utilised this framework to support this relationship (Appelbaum et al., 2000; Jiang et al., 2012). Indeed, authors have claimed that each bundle of this AMO model (ability, motivation and opportunity enhancing practices) is necessary for creating engaged and satisfied employees (Appelbaum et al., 2000). Furthermore, only limited studies have looked at the impact of HPWS on job satisfaction from employee perspectives

(Mao, Song, & Han, 2013). However, it is argued that the employees´ perception of HPWS is significantly and positively related to job satisfaction (Kloutsiniotis & Mihail, 2017; Kooij, Jansen, Dikkers, & De Lange, 2010). Considering the above gaps, our research thus focuses on building the relationship between employee perceptions of HPWS and employee satisfaction.

2.4.2 HPWS and Employee Motivation

The positive relationship between HPWS and employee motivation is essential, as these practices attend to employee needs, such as autonomy, relatedness and competence, which produce intrinsic motivation in organisations (Deci & Ryan, 2000; García-Chas et al., 2014). However, limited studies have reported positive links among these variables (Wu et al. 2001). Indeed, there is a need to study further the effects of HPWS on employee motivation. It is argued that intrinsically motivated employees tend to enjoy and be interested in their work, which then enables the delivery of high-quality services (Kreye, 2016). The fulfilling nature of work and skill development is the core motivation factor (Kreye, 2016). We focus on supporting employee perceptions of HPWS and employee motivation via the AMO model.

2.4.3 HPWS and Employee Intention to Leave

Building a favourable relationship between HPWS and employees' voluntary intention to leave provides fruitful resolutions for organisational HPWS to reduce turnover and increase employees' productivity (Sun et al., 2007). Consequently, many researchers have examined the links between these constructs and found a strong negative relationship among them (Bergiel, Nguyen, Clenney, & Stephen, 2009; Jyoti, Rani, & Gandotra, 2015). Amongst these authors, some have argued that a few practices have a more negative impact on the intention to leave. For example, talent and leadership and development practices are negatively related to

employee turnover intentions (Chami-Malaeb & Garavan, 2013; Srirangam Ramaprasad, Lakshminarayanan, & Pai, 2018). However, Jyoti et al. (2015) argue that bundles of HRM practices have a greater impact on employees' turnover intentions than individual practices. In particular, a recent study has claimed that opportunity-enhancing HPWS practices reduce absenteeism in organisations (De Reuver, Van de Voorde, & Kilroy, 2019). Moreover, researchers have argued that employees' perceived HRM practices exert a larger negative impact on employees' turnover intentions and absenteeism (Ang et al., 2013; De Reuver et al., 2019). Considering the above facts, we thus develop the link between employee perceptions of HPWS and employee intention to leave using a bundle of HRM practices, referred to as the AMO model.

2.5 Mediating Mechanisms between HPWS and Employee Outcomes

Scholars have argued that HPWS may not directly produce favourable employee outcomes and behaviours in organisations, rather, the favourable relationship among these constructs can be achieved through various mediating mechanisms (Wright & Nishii, 2007). So, it is argued that an understanding of the mechanisms influencing the relationship between HPWS and employee outcomes is still limited (Petrescu & Simmons, 2008; Boxall, 2016). This is often labelled as the '*HRM black box*' and thus requires further research in HRM. Additionally, in unlocking the '*HRM black box*', Wright and Nishii (2007) have strongly emphasised the need to consider individual-level mediating mechanisms rather than macro-level mechanisms. They have further argued that employees' positive feelings of HRM practices first leads to enhancing employee attitudinal outcomes before achieving behavioural and organisational outcomes. Thus, these above-identified gaps enable us to examine two employee-level mediating mechanisms, job-based psychological ownership and on-the-job embeddedness, between HPWS and employee outcomes.

2.5.1 On-the-Job Embeddedness in HPWS

The construct of job embeddedness first evolved in the work of Mitchell, Holtom, Lee, Sablynski and Erez (2001), from their unfolding model of turnover. Job embeddedness refers to the constraining forces that influence an employee's decision to stay in his or her current job (Holtom, Mitchell, & Lee, 2006, p. 319) These constraining forces include individuals': (1) perceptions of their fit with the job, (2) links to other people, teams, groups and community organisation, and (3) perceived cost of scarifying things and benefits if they leave their jobs (Holtom et al., 2006; Mitchell et al., 2001). The job embeddedness theory explains a variety of on-the-job and off-the-job factors that influence employee retention, and mainly focuses on constraining or embedded factors for staying in jobs rather than quitting jobs (Holtom et al., 2006). Job embeddedness is thus considered to be a critical predictor in determining employees' voluntary turnover and employees' intention to quit their organisations. Furthermore, it highlights that employees who are more embedded in their organisation or community are more likely to remain in their current jobs (Holtom & O'Neill, 2004; Mitchell et al., 2001).

Mitchell et al. (2001) suggest three aspects of job embeddedness that are often labelled as dimensions of job embeddedness: fits, links and sacrifice. 'Fits' refers to employees' perceived compatibility or comfort with their organisations or surrounding environment. 'Links' refers to employees' formal and informal connections with the organisations, other people or activities. And, 'Sacrifice' refers to the employees' perceived cost of material or psychological benefits as a result of leaving their current job (Mitchell et al., 2001, pp. 1104-1105). Job embeddedness has also been viewed from its two main dimensions: on-the-job embeddedness and off-the-job embeddedness. On-the-job embeddedness is often related to embedded factors from the organisation, whereas off-the-job embeddedness is associated with community

factors. Although job embeddedness has been found to produce a favourable employee outcome, there are also some mixed and contradictory findings when this is tested with HRM practices (Bergiel et al., 2009; Tian et al., 2016). As Lee et al. (2004) note, it is not clear which HRM practices particularly strengthen job embeddedness, and most research in this area is still equivocal.

2.5.2 Job-Based Psychological Ownership in HPWS

Psychological ownership has become an emerging psychological phenomenon, as it is a crucial predictor of employee attitudes and behaviour (Van Linn & Pierce, 2004). Pierce and his colleagues first theorised the term 'psychological ownership', defining it as "the state in which individuals feel as though the target of ownership (material or immaterial in nature), or a piece of it, is 'theirs' (i.e., It is MINE!")" (Pierce et al., 2001, p. 299). Scholars thus claim that psychological ownership emerges even in the absence of financial or legal ownership towards target ownership, and this target of ownership could be either the employee's organisation or their jobs (Vandewalle, Dyne, & Kostova, 1995). Based on this, two types of psychological ownership have been identified: organisation-based and job-based (Pierce et al., 2001).

Psychological ownership has been studied with diverse concepts in different contexts. Practitioners have tested psychological ownership in organisational contexts and found consistent results showing that psychological ownership is positively related to attitudinal variables, such as satisfaction, commitment and extra-role behaviour (Vandewalle et al., 1995). Additionally, organisational commitment, job satisfaction, organisation-based self-esteem and organisational citizenship were also found to be related positively to psychological ownership (Van Linn & Pierce, 2004). However, the literature still fails to examine job-based

psychological ownership as a mediating role in HRM, a notable gap in our extant understanding.

2.6 Inclusive Leadership and Professional Identity as Possible Moderators

Studies have argued that the relationship between HPWS and various employee attitudes could be further strengthened when certain factors are present in organisations. Thus, we argue for inclusive leadership and professional identity as possible moderators in our research.

2.6.1 Inclusive Leadership in HPWS

Several researchers have mainly focused on different leadership styles, such as transformational and charismatic leadership. However, some argue that transformational leadership is too broad to create a wide range of employee-favourable behaviours, such as employee involvement, engagement and innovation, because too much dependence on leader and empowerment often reduces employee engagement in organisations (Kark, Shamir, & Chen, 2003). Later, researchers agreed that a specific leadership style is needed in order to motivate highly and facilitate employees to perform their tasks (Timms, 2016). Thus, inclusive leadership has recently attracted much attention in HRM research since it is considered to be a specific form of relational leadership (Carmeli, Reiter-Palmon, & Ziv, 2010; Hollander, 2009; Nembhard & Edmondson, 2006; Nishii & Mayer, 2009).

When we searched for how leadership could reinforce HPWS and employee attitudes, we chose to focus on the fact that inclusive leadership could be a mode of fostering favourable psychological feelings in employees towards their jobs. Recently, researchers have agreed that the role of an inclusive leader is crucial in organisations, as it invites and appreciates employees' inputs. This helps them to believe that their voices are genuinely valued, and results

in greater involvement in and attachment to their organisations. (Hollander, 2009; Nembhard & Edmondson, 2006). Furthermore, inclusive leadership may motivate employees to be more actively engaged in their jobs by fostering in them a sense of having positive feelings towards their jobs (Nishii & Mayer, 2009). We suggest that leader inclusiveness is a tool for fostering employees' sense of psychological ownership through fostering their perceptions of belonging, and enhancing a sense of their unique contribution to achieving positive employee outcomes (Randel et al., 2018).

Inclusive leadership refers to leaders who exhibit openness, accessibility and availability in their interactions with their followers (Carmeli et al., 2010, p. 250). Leader inclusiveness is defined as "words and deeds, by a leader, or leaders, that indicate an invitation and appreciation for others' active contribution" (Nembhard & Edmondson, 2006, p. 947). Inclusive leadership is, thus, a key to managing diversity, triggering employees' positive moods, and promoting employee voices, their sense of belonging and engagement, and encouraging employees to learn from errors, which then result in fostering employee's innovative behaviour and work engagement in organisations (Carmeli et al., 2010; Nishii & Mayer, 2009; Qingyan, Duanxu, & Xi, 2018; Ye, Wang, & Li, 2019).

More studies focus on inclusive leadership by promoting employee attitudes and behaviours in a team setting (Nishii & Mayer, 2009; Qingyan et al., 2018). For example, inclusive leadership has been found to promote team effectiveness, innovation and favourable team outcomes, as inclusive leaders are readily available, listen and pay attention to the needs of their subordinates (Carmeli et al., 2010; Nembhard & Edmondson, 2006).   (Mitchell et al., 2015; Ye, Wang, & Guo, 2019). However, inclusive leaders are also crucial in fostering individual employees' behaviours. For example, a recent study claims that employee task performance rises when

inclusive leadership increases from low to moderate (Xiaotao, 2018). Although leader inclusiveness produces individual and team outcomes, how this leadership strengthens the relationship between HPWS and employee psychological ownership still remains unexplored. Moreover, there are some contradictory findings on HPWS and leadership literature. For example, recent research found that the interaction of unit service leadership and experienced service-oriented HPWS did not show any significant effect on thriving at work, at both the within-group and between-group levels (Jo et al., 2020). Another very recent study also revealed the negative interaction effects between HPWPs and supportive leadership (Hauff., Felfe & Klug (2022). This study further claimed that when employees experience low supportive leadership, HPWPs can reveal strong effects on job satisfaction and engagement; on the other hand when employees experience high supportive leadership, HPWPs' effects on job satisfaction and engagement are weaker (Hauff et al., 2022).

Thus, our research purpose is to examine inclusive leadership as a moderating role between HPWS and job-based psychological ownership.

2.6.2 Professional Identity in HPWS

Professional identity is interconnected with professional self-concept, cultivated from social and cultural factors, such as professional socialisation (Randle & Arthur, 2007). Although the construct of professional identity is not clearly defined in the literature, it is commonly described as a "sense of connection to the values of an organisation" (Mrdjenovich & Moore, 2004, p. 72) or socialisation to the shared values and attributes of a profession (Johnson et al., 2012). Although it is argued that the professional identity of healthcare professionals is formed before they enter into medical education, and subsequently develops through educational and clinical experiences during their professional careers (Johnson, Cowin, Wilson, & Young,

2012), professional identity attracts little attention in studies. For example, professional identity has been tested with enhanced employee attitudes, such as job satisfaction, intention to leave and burnout (Sabanciogullari & Dogan, 2015); however, few studies focus on studying professional identity as mediation in the relationship between HPWS and psychological empowerment (Bartram, Karimi, Leggat, & Stanton, 2014). Indeed, developing professional identity among employees is considered to be a central part of organisations, as it affects their turnover intentions (Mrdjenovich & Moore, 2004). However, interestingly, researchers have examined the dark side of professional identity in organisations, as it affects employees' attitudes, behaviours, and subsequently performance (Baruch & Cohen, 2007). The extant literature argues that professional identification generally occurs before organisational identification. Thus, professionals such as doctors, accountants or psychologists are identified with their affiliation or profession before they start any employment (Baruch & Cohen, 2007). Moreover, the literature claims that employees with low professional identity and low status in organisations are more likely to be influenced by HPWS efforts. Based on this logic, we argue that HPWS are less likely to influence employee job satisfaction when a high professional identity exists in the organisation.

2.7 Summary of Literature Gap

Reviewing the literature on HPWS confirms that there is still a need to centralise employee outcomes in HPWS studies. Despite a growing body of literature contributing to HRM, which explores the association between HRM and macro-level outcomes, there is little attention given to employee-level outcomes through individual-level mediating mechanisms (Boselie et al., 2005; Wright & Nishii, 2007). Moreover, the limited studies at the employee level stress the need to call for more research that examines how HPWS affect employee outcomes (García-Chas, Neira-Fontela, & Castro-Casal, 2014; Paauwe & Boselie, 2005; Wright & Nishii, 2006;

Boselie et al., 2005). In other words, it would be highly beneficial for the unpacking of the *'HRM black box'* issue to discover through which mechanisms HPWS can improve employee attitudes and outcomes in the workplace at the individual level from the employees' perceptions and views (Wright & Nishii, 2007; Kehoe & Wright, 2013; Takeuchi et al., 2007). Researchers argue that HPWS first lead to enhanced employee outcomes before achieving organisational performance or success. Although extant literature shows the mounting interest in examining how HPWS affect employee outcomes, there are still notable gaps in the literature. Researching these would lead to understanding better the so-called '*HRM black box'* link. In unravelling this black box issue, there are rising ongoing calls to introduce more mediating and moderating mechanisms in HPWS-employee outcomes studies.

Empirical studies that specifically examine the impact of HPWS from employee perspectives are still lacking (Macky & Boxall, 2007). Specifically, there is limited understanding of employees' feelings towards their jobs (or job-based psychological ownership) and embeddedness with their jobs, and, thus, these factors need to be considered. (Liu et al., 2017; Tian et al., 2016). Finally, there also exist gaps in the literature when it comes to examining the impact of inclusive leadership and professional identity as possible moderating mechanisms affecting the relationship between HPWS and key attitudinal factors (e.g. job-based psychological ownership and on-the-job embeddedness). Therefore, keeping in mind these identified gaps, the proposed study conceptualises and operationalises these variables in our conceptual model to analyse the moderating and mediating effects between employee perceptions of HPWS and the three employee-level outcomes: job satisfaction, employee motivation and intention to leave. Furthermore, previous studies found mixed, contradictory and inconsistent findings in the HPWS-employee outcomes relationship. Although HPWS

have been studied in diverse contexts, studies of HPWS in the healthcare setting are still limited (Ang et al., 2013).

2.8 Hypotheses Development and Conceptual Framework

Following the extensive literature review on HPWS and employee outcomes relationships, this section discusses each hypothesis developed for this study. The research questions of this study were transformed into a set of testable hypotheses to be tested using empirical data. The hypothesised associations that are drawn among constructs are based on established theories, empirical shreds of evidence and existing literature gaps. First, this section presents and argues each hypothesis formulated for this study using theoretical and empirical support. Accordingly, 18 hypotheses were developed for testing by this study. These hypotheses then formed the basis of the conceptual framework to be tested in the research. The conceptual framework is shown in Figure 2.1, and depicts the relationships in HPWS–employee outcomes pathways. This study uses AMO theory to explain the developed hypotheses. Each hypothesis captures the direct and indirect effects of the relationships between the study variables, and is discussed below.

2.8.1 Direct Effects of Employees' Perceptions of HPWS and Employee Outcomes

To better understand the relationship between HPWS and employee outcomes, this study uses AMO Theory to conceptualise HPWS (Appelbaum et al., 2000). Drawing on AMO theory, HPWS lead to enhanced employee job satisfaction through ability-motivation-and opportunity enhancing practices. First, ability-enhancing practices increase employees' knowledge, skills and abilities through proper recruitment, selection and training process (Wright & Kehoe, 2008). Skilled employees are more likely to be satisfied with their jobs (Appelbaum et al.,

2000). Further, the literature suggests that motivation-enhancing practices, such as providing a good work environment, providing opportunities for career development, fostering close working relationships, creating interesting job duties and allowing flexible work schedules make employees happy and satisfied with their jobs (Price, 2002; Sjögren, Fochsen, Josephson, & Lagerström, 2005). Moreover, the literature also supports the contention that opportunity-enhancing practices could be a better way to satisfy employees in the workplace. For example, employees who express their views in regular meetings are more likely to raise their job satisfaction (Ileana Petrescu & Simmons, 2008). Employees with greater autonomy and decision-making participation are more satisfied with their jobs (Price, 2002; Sjögren et al., 2005).

Furthermore, numerous studies also establish a positive significant relationship between HRM and job satisfaction (Ananthram, Xerri, Teo, & Connell, 2018; Mihail & Kloutsiniotis, 2016; Takeuchi et al., 2009; Zhang, Akhtar, Bal, Zhang, & Talat, 2018; Boxall and Macky, 2009; Ang et al., 2003; Fabi, Lacoursière, & Raymond, 2015; García-Chas, Neira-Fontela, & Varela-Neira, 2016; Kloutsiniotis & Mihail, 2017; Macky & Boxall, 2007; Boxall & Macky, 2014; Petrescu & Simmons, 2008). Additionally, only limited studies have looked at the impact of HPWS from the employees' perspective on job satisfaction (Mao, Song, & Han, 2013; Kloutsiniotis & Mihail, 2017). However, it is argued that employees´ perception of HPWS is significantly and positively related to job satisfaction (Kloutsiniotis & Mihail, 2017; Kooij et al., 2010). Based on the above argument, combining insights from existing research, the following hypothesis is developed:

> *Hypothesis 1 (a): Higher levels of employees' perceptions of HPWS are positively related to employee job satisfaction.*
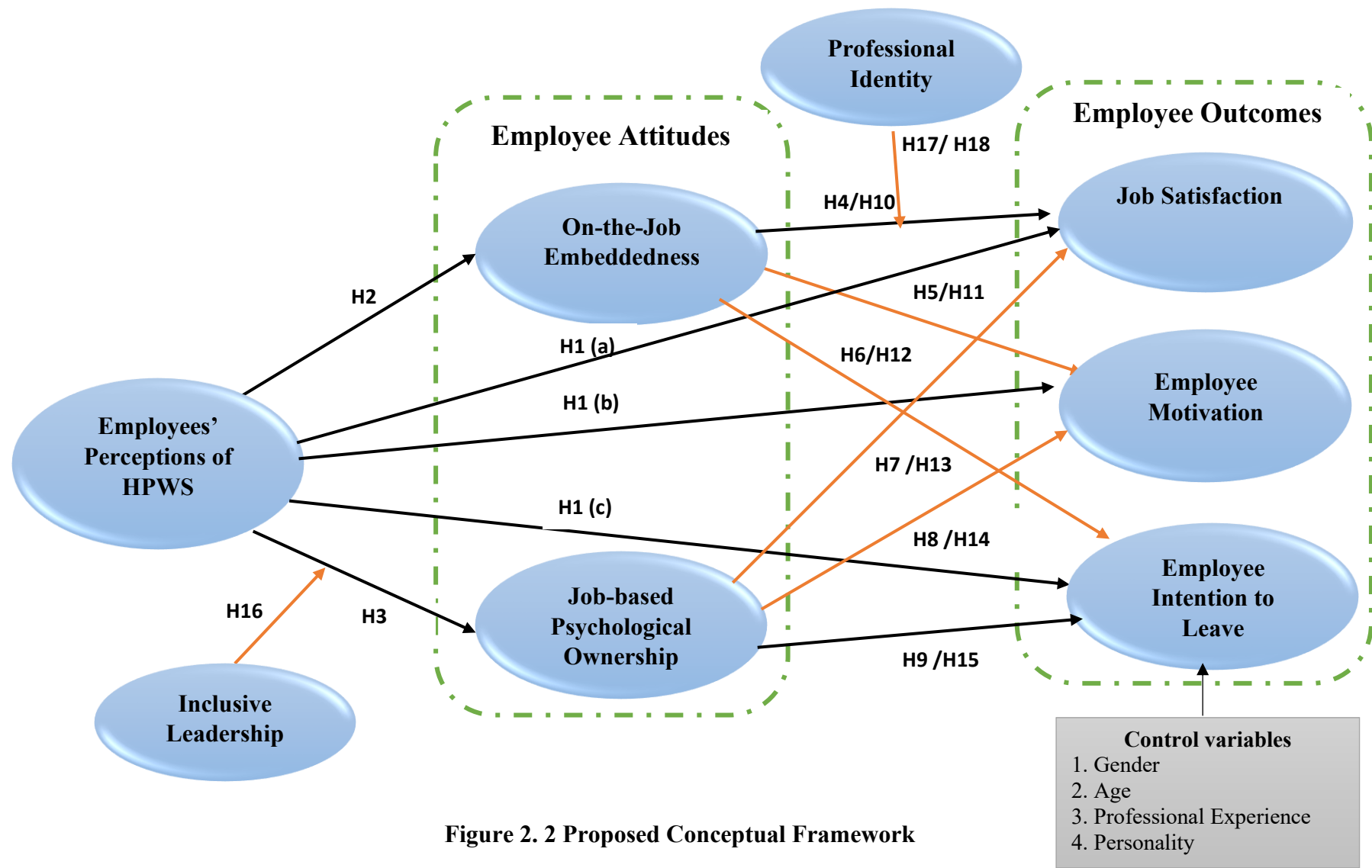
Figure 2. 2 Proposed Conceptual Framework

Drawing on the AMO Theory, we also argue that HPWS lead to increased workplace employee motivation. For instance, ability-enhancing practices, such as rigorous staffing and effective training, lead to employees being more involved and motivated in their jobs (Kaushik & Mukherjee, 2021). Motivation-enhancing practices, such as high wages, promotion and growth in the organisation, job security, interesting work and full appreciation of completed work, induce an employee to be motivated (Kaushik & Mukherjee, 2021; Ozkeser, 2019; Ryan & Deci, 2000). Motivational practices are more likely to foster an employee's greater efforts, which in turn enhance employee motivation (K. Jiang et al., 2012). Previous studies also argue that flexible job design and permitting employees to participate in decision-making allows them to be more engaged, involved in the work and to cope with challenges in the workplace (Ryan & Deci, 2000). Moreover, a previous study found that motivation-enhancing HR practices and opportunity-enhancing HR practices are more likely to improve employee motivation (Jiang et al., 2012). Also, Wu et al. (2011) found that HPWS have positive effects on employees' intrinsic motivation. This leads to the following hypothesis:

Hypothesis 1 (b): Higher levels of employees' perceptions of HPWS are positively related to employee motivation.

Moreover, we argue that HPWS lead to lower employee turnover intentions through ability-motivation and opportunity-enhancing practices. For example, the literature finds that ability-enhancing HRM practices, such as rigorous staffing, extensive training, competence development programmes and career growth, leads to a reduction in employee turnover intentions at the workplace (Jyoti, 2015; Lam et al., 2009; Pajo et al., 2010; Kuvaas, 2008). In addition, the literature also finds that motivation-enhancing practices lead to a reduction in employee turnover intentions. For instance, providing a fair salary (Ghosh et al., 2013; Roberto, 2008) and a variety of rewards and retention-oriented pay, including performance-based pay,

are keys to retaining top talents (Bambacas & Kulik, 2013; Gkorezis et al., 2018; Lee & Jimenez, 2011; Smit et al., 2015; Takeuchi & Takeuchi, 2013). Moreover, studies have found that HRM practices, such as promotion (Busari, 2017), recognition (Cesário & Magalhães, 2017; Ertürk, 2014), a flexible schedule (Nie et al., 2018), quality performance appraisal (Brown et al., 2010) and job security (Gkorezis et al., 2018; Nie et al., 2018), are other variables that affect employee turnover intentions. Also, past studies find that employees' turnover intentions are reduced through opportunity-enhancing practices. For example, researchers argue that greater participation in decision-making, empowerment, good communication and self-managed teams are potent tools for retaining employees (García-Chas et al., 2014; Ghosh & Gurunathan, 2015; Kuean et al., 2010; Karatepe, 2013). Based on the above arguments combining insights from existing research, the following hypothesis is proposed:

Hypothesis 1 (c):   Higher levels of employees' perceptions of HPWS are negatively related to employee intention to leave.

2.8.2 Direct Effects of Employees' Perceptions of HPWS and On-the-Job Embeddedness

Although the current literature found that job embeddedness has a positive impact on employee outcomes, some mixed and contradictory findings have also been reported when tested with HRM practices (Bergiel et al., 2009; Tian et al., 2016). Moreover, it is not clear which HRM practices particularly strengthen job embeddedness, with most research in this area being equivocal (Lee et al., 2004). The existing literature also argues that applying AMO theory leads HPWS to enhance on-the-job embeddedness by creating a greater job fit, links with an organisation and a belief that it would be a sacrifice to leave the organisation. The literature indicates that HPWS lead to the achieving of a 'person-job fit' component of job embeddedness by enhancing employees' ability. This could happen when organisations initially focus on employees' fit with the organisation through their entry process (i.e. pre-employment surveys,

recruitment and selection) (Holtom et al., 2006). The current literature also argues that a better fit between employees and their jobs is more likely to reduce employee turnover, provide them with challenging work and professional growth, and satisfy their future career motives (Holtom et al., 2006). Moreover, HPWS can also lead to improving employees' links with their organisation by providing opportunities for employees. Indeed, creating employees' ties with managers, co-workers and their jobs is a good strategy for improving their retention, as it provides pathways for employees to solve their issues at work in a collaborative way (Holtom et al., 2006; Mitchell et al., 2001).

Furthermore, the literature suggests that HPWS lead to the sacrifice component of job embeddedness by motivating employees. For example, when employees consider quitting, they often evaluate the anticipated cost of material or psychological benefits lost by leaving the organisation (Holtom & O'Neill, 2004). Opportunities for employee development and financial and non-financial incentives may persuade employees to change their perceptions of sacrifice (Bambacas & Kulik, 2013; Holtom et al., 2006). Based on the insights outlined above, the following hypothesis is proposed:

> *Hypothesis 2: Higher levels of employees' perceptions of HPWS are positively related to on-the-job embeddedness.*

2.8.3 Direct Effects of Employees' Perceptions of HPWS and Job-Based Psychological Ownership

Applying the AMO model, we argue that job-based psychological ownership can be improved through ability-, motivation- and opportunity-enhancing practices (Pierce et al., 2001). First, HPWS may foster job-based psychological ownership through ability-enhancing practices. For example, providing skill variety is more likely to help employees invest themselves in their

jobs (Pierce et al., 2009). Moreover, Olckers and Van Zyl (2016) find that employment equity perceptions predict psychological ownership. Second, HPWS may enhance job-based psychological ownership by motivating employees. For instance, providing performance increments, support and resources leads employees to be fully engaged and feel a high sense of ownership towards their jobs (Gruman & Saks, 2011). Third, HPWS may stimulate job-based psychological ownership through opportunity-enhancing practices. For example, employees are more likely to sense a higher level of ownership for their jobs after they have received opportunities to exercise control and autonomy and participate in job-related decisions (Han et al., 2010; O'Driscoll et al., 2006). Moreover, one study found that employees who are provided with more job control over their jobs are more likely to enhance their job-based psychological ownership (He & Jon, 2015). Thus, based on the above arguments, the following hypothesis is formulated:

> *Hypothesis 3: Higher levels of employees' perceptions of HPWS are positively related to job-based psychological ownership.*

2.8.4 Direct Effects of On-the-Job Embeddedness and Employee Outcomes

Past studies suggest that higher levels of embeddedness in employees lead to motivated employees who are engaged in their jobs (Karatepe & Ngeche, 2012). The literature points out that employees who feel positive about their jobs are more likely to be satisfied and stay with their current organisation, as they enjoy very tight personal links with their co-workers (Holtom et al., 2006; Mitchell et al., 2001). Moreover, the interpersonal relationships in organisations, such as communication with co-workers and supervisors, lead to enhanced employee job satisfaction (Price, 2002). Also, the literature argues that job embeddedness is considered to be a critical predictor in determining employees' voluntary turnover and employees' intention to quit their organisation. It highlights that those employees who are more embedded in their

organisation or community are more likely to remain in their current jobs (Holtom & O'Neill, 2004; Mitchell et al., 2001). A recent study also found a favourable relationship between job-embeddedness and employee retention among doctors (Aman-Ullah, Aziz, Ibrahim, Mehmood, & Abdullah Abbas, 2021). Thus, based on the above, the following hypotheses are formulated:

Hypothesis 4: Higher levels of on-the-job embeddedness are positively related to employee job satisfaction.

Hypothesis 5: Higher levels of on-the-job embeddedness are positively related to employee motivation.

Hypothesis 6: Higher levels of on-the-job embeddedness are positively related to employee intention to leave.

2.8.5 Direct Effects of Job-Based Psychological Ownership and Employee Outcomes

An empirical study reveals a favourable link between managers' on-the-job psychological ownership and satisfaction (Mayhew, Ashkanasy, Bramble, & Gardner, 2007). It is also argued that employees who are given greater autonomy and social integration are more likely to be satisfied with and committed to their jobs (Price, 2002). Past empirical studies have also found that psychological ownership of employees reduces their employee turnover intentions. The studies of Lu et al. (2017), Olckers and Enslin (2016), and O'Driscoll et al. (2006) argue that employees who sense a higher level of psychological ownership for their jobs and/or organisation are less likely to leave their workplaces. Another empirical study confirms the negative relationship between job-based psychological ownership and employee intention to leave (He & Jon, 2015). Furthermore, this study reveals that job-based psychological ownership is stronger than organisation-based psychological ownership in creating a bond between employees and their jobs. It is also argued that employees who possess more

psychological capital are more likely to commit to their jobs and be motivated, and consequently are less likely to leave their jobs (Schulz et al., 2014).

Past empirical studies found that psychological ownership of employees also reduces their employee turnover intentions. (Lu et al., 2017; Olckers & Enslin, 2016; O'Driscoll et al., 2006). Those studies argue that employees who sense a higher level of psychological ownership for their jobs and/or organisation are less likely to leave their workplaces. Another empirical study states that job-based psychological ownership is stronger than organisation-based psychological ownership in creating a bond between employees and their jobs (He & Jon, 2015). It is also argued that employees who possess more psychological capital are more likely to commit to their jobs, and are less likely to leave (Schulz et al., 2014). Thus, based on the above, the following hypotheses are formulated:

> *Hypothesis 7: Higher levels of job-based psychological ownership are positively related to employee job satisfaction.*
>
> *Hypothesis 8: Higher levels of job-based psychological ownership are positively related to employee motivation.*
>
> *Hypothesis 9: Higher levels of job-based psychological ownership are negatively related to employee intention to leave.*

2.8.6 On-the-Job Embeddedness as a Mediator between Employees' Perceptions of HPWS and Employee Outcomes

Past studies demonstrate that job embeddedness is an excellent tool for retaining employees in organisations (Holtom & O'Neill, 2004; Stroth, 2010) and, therefore, organisations need to consider their human resource management practices in order to enhance job embeddedness (Bergiel et al., 2009; Tian et al., 2016). Examples of this include providing flexible work

schedules, autonomy and influence over decisions promotes employee satisfaction, which then has an effect on the turnover intentions of employees (Sjögren et al., 2005). Moreover, HPWS practices help to recruit and retain employees who show and develop greater knowledge, skills and abilities, while work engagement, reducing early withdrawals ideas, enhance job satisfaction, and positive outcomes job performance increase productivity to achieve organisational competitive advantage (Karatepe, 2013; Kloutsiniotis & Mihail, 2017; Snape & Redman, 2010). Conversely, past studies also argue that the higher the sacrifice associated with leaving an organisation, the more likely employees' intention to quit will increase (Karatepe & Ngeche, 2012).

Moreover, past studies considered only a few HRM practices where job embeddedness was fully mediated, and they produced mixed findings. For example, training was also positively related to the intention to quit (Bergiel et al., 2009). In addition, a previous study found that the job embeddedness of employees first motivates those employees, which, in turn, helps to form and develop the innovative behaviours of those same employees in the workplace (Ng & Feldman, 2010). Another study found that HRM practices lead to increases in employee job embeddedness, and then achievements in employee job performance (Tian et al., 2016). However, previous studies mostly consider off-the-job embeddedness factors (organisation-based embeddedness factors), not on-the-job embeddedness, to examine the link between HRM and employee outcomes. Besides these studies, no attempt has been made to examine the mediating mechanisms of on-the-job embeddedness between HPWS and employee outcomes, such as job satisfaction and employee motivation. Therefore, the above gap and ambiguous findings lead to the development of the following hypotheses:

Hypothesis 10: On-the-job embeddedness positively mediates the relationship between employees' perceptions of HPWS and employee job satisfaction.

Hypothesis 11: On-the-job embeddedness positively mediates the relationship between employees' perceptions of HPWS and employee motivation.

Hypothesis 12: On-the-job embeddedness negatively mediates the relationship between employees' perceptions of HPWS and employee intention to leave.

2.8.7 Job-Based Psychological Ownership as a Mediator between Employees' Perceptions of HPWS and Employee Outcomes

The findings from past studies indicate that when psychological ownership is examined as a mediator, it is likely to provide favourable employee and organisational outcomes (Liu et al., 2017). Thus, to better understand the relationship between HPWS and employee outcomes, this study argues that HPWS job-based psychological ownership plays a key mediating role between HPWS and employee outcomes. For example, a study was undertaken recently to examine the effects on organisation-based psychological ownership between HRM practices and employees' job satisfaction (Liu et al., 2017). However, this research ignored job-based psychological ownership in establishing the relationship between HPWS and job satisfaction. Additionally, studies emphasise that, if organisations provide a proper work environment, such as one that includes autonomy in job design and participation in decision-making, this is likely to increase employees' perceptions of control (Pierce et al., 2004), because job autonomy leads employees to be more satisfied and committed to their organisations (Price, 2002). Moreover, employees who have greater control over their jobs are more likely to demonstrate higher levels of psychological ownership, which leads to enhanced employee outcomes (Md-Sidin, Sambasivan, & Muniandy, 2009). In this regard, job-based psychological ownership is closely related to job design, where individuals can potentially have some control over their jobs,

develop an intimate knowledge of their jobs and invest in learning more about their jobs. Previous research used concern for employee climate as a mediator between HPWS and employee job satisfaction (Takeuchi et al., 2009).

Moreover, the literature argues that participation in decision-making enables employees to feel a stronger sense of ownership towards their jobs, leading them to give up their ideas of leaving their organisations. (Kuean et al., 2010). Macky and Boxall (2007) argue that HPWS lead to stronger psychological identification with employees' jobs, and are more likely to increase employees' intentions to remain with their organisations. It is also argued that employees who experience high satisfaction with training opportunities are more likely to be satisfied, motivated and highly engaged with their jobs, leading to a greater sense of attachment to their work (Memon et al., 2016). Rathi (2017) further argues that when organisations satisfy employees' psychological needs, employees are ready to demonstrate higher emotional attachment and identification with their jobs, reducing employee turnover intention. Furthermore, the literature argues that employees' perceptions of HRM practices are more likely to generate a positive psychological response and reduce turnover intentions (Wei, 2015).

Thus, to better understand the relationship between HPWS and employee intention to leave, we argue that HPWS job-based psychological ownership plays a key mediating role between HPWS and employee intention to leave. The literature argues that, as organisations provide a proper work environment such as job design autonomy and participation in decision-making, this is likely to increase employees' perceptions of control (Pierce et al., 2004), On the other hand, it is argued that employees are more likely to feel the dark side of HPWS when they receive low levels of job control (Jensen et al., 2013). The literature also argues that

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participation in decision-making enables employees to feel a stronger sense of ownership towards their jobs, leading them to give up their ideas to leave the organisations (Kuean et al., 2010). Macky and Boxall (2007) argue that HPWS lead to stronger psychological identification with employees' jobs, and this is more likely to increase employee intentions to remain with their organisation.

It is argued that employees who experience high satisfaction with training opportunities are more likely to be satisfied and highly engaged with their jobs, leading to a greater sense of attachment towards their work (Memon et al., 2016). Rathi (2017) further argues that when organisations satisfy employees' psychological needs, employees are ready to demonstrate higher emotional attachment and identification with their jobs, reducing employee turnover intention. Furthermore, the literature argues that employee perceptions of HRM practices are more likely to generate a positive psychological response and reduce turnover intentions (Wei, 2015). Therefore, based on the above justifications and logical arguments, the following hypotheses are developed:

> *Hypothesis 13: Job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and employee job satisfaction.*
>
> *Hypothesis 14: Job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and employee motivation.*
>
> *Hypothesis 15: Job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and employee intention to leave.*

2.8.8 The Moderating Role of Inclusive Leadership

While HPWS lead to increased job-based psychological ownership, it is likely to depend on how much leader inclusiveness is being exercised in the organisation. We argue that

employees' perceptions of leader inclusiveness increase the likelihood of stimulating employee feelings of ownership toward their jobs. In a healthcare context, for example, the active inclusive behaviour of physicians plays a vital role in inviting and appreciating others' meaningful engagement in quality improvement work (Nembhard & Edmondson, 2006) such that employees feel a high level of positive feelings about their jobs (Carmeli et al., 2010; Randel et al., 2018). This study also argues that, in an inclusive setting, inclusive leaders encourage and reinforce employees' behaviours that will keep them engaged in their jobs, for instance, creating a favourable environment and providing avenues for employees to participate in decision-making, thus allowing employees to experience control over their job tasks through the high sense of ownership towards their jobs (Randel et al., 2018). It is also argued that inclusive leadership is a key to managing diversity, triggering employees' positive moods and encouraging employees to feel positive about their jobs (Nishii & Mayer, 2009; Qingyan, Duanxu, & Xi, 2018). Employees are more willing to feel positive about jobs when leaders are open, accessible and available to them (Carmeli et al., 2010), and those leaders help employees intimately know their jobs. Therefore, these arguments and justifications lead to the next hypothesis:

Hypothesis 16: Leader inclusiveness moderates the relationship between HPWS and job-based psychological ownership

2.8.9 The Moderating Role of Professional Identity

While HPWS are argued to exert a positive association with on-the-job embeddedness and employee job satisfaction, this is likely to depend on how employees are professionally identified in the workplace. Past studies argue that developing professional identity among healthcare professionals is considered a central part of the healthcare setting, as it affects their turnover intentions (Mrdjenovich & Moore, 2004). For example, it is argued that when nurses

have a better understanding of the role of nursing as their profession, this leads to greater job satisfaction, resulting in greater nurse retention and enhanced patient care (Horton et al., 2007). Hence, a healthy self-concept is more likely to impact patient care positively and thus influence the employees' decision to stay at their current workplace (Randle & Arthur, 2007).

Although the positive side of professional identity receives much attention in the literature, the literature on professional identity needs also to emphasise the negative sides of employees' professional identity as well, as they heavily affect employee behaviours and outcomes in the workplace. We thus argue that employees with a high level of professional identity will not be influenced by job embeddedness factors such as employee-job fit, creating links with people in organisations and sacrificing feelings that result from leaving jobs. The literature suggests that high-level professionals are more likely to leave their jobs and find alternative employment, even though they have a low level of experience in their new position (Raeder & Grote, 2007). It is also argued that well-qualified employees are more likely to obtain new employment in the labour market very quickly. However, employees with low professional identity are less likely to obtain benefits from the outside employment market; as a result, they continue to perform their jobs (Raeder & Grote, 2007).

Kirpal and Brown (2007) argue that providing flexibility in jobs leads employees to feel pressure and new demands in their jobs. This causes employees to react differently in being involved and committed to their jobs. Moreover, it is argued that when organisations provide more flexibility, mobility and opportunities for learning, it enables employees to further develop their professional goals. Subsequently, they reduce their commitment and performance in their current job and develop ideas of leaving the organisation (Kirpal & Brown, 2007). Further, these authors argue that employees who are given priority in their own professional

goals and development are more likely to work individually, based on their professional abilities and skills, rather than demonstrate their higher work-related attitudes and outcomes, such as commitment and involvement (Kirpal & Brown, 2007).

Scholars also argue that professional identity is wholly part of self-perception, and outside contextual factors cannot impact employees' identity. For example, Sennett (1998) argues that high job flexibility disrupts employees' identity. Samnani and Singh (2014) argue that compensation HR practices work practices reduce the productivity of employees. Based on the above literature argument, we assert that HPWS are less likely to increase on-the-job embeddedness to a greater degree when a high professional identity exists in the organisation. A stronger identity with the profession will weaken employees' embeddedness and, subsequently, employee job satisfaction. These arguments and logic lead us to develop the hypotheses below:

> *Hypothesis 17: Professional identity negatively moderates the relationship between on-the-job embeddedness and employee job satisfaction.*

> *Hypothesis 18: Professional identity negatively moderates the mediating effect of on-the-job embeddedness on the relationship between employees' perceptions of HPWS and employee job satisfaction.*

2.9 Chapter Summary

This chapter reviewed the scholarly literature on HPWS and employee outcomes associations, and then articulated the research gaps. First, this chapter reviewed the HPWS literature by presenting evolutions of such thoughts and definitions of HPWS, and presented the link with HPWS and AMO theory, as this study has been mainly drawn from AMO theory. Second, each

individual set of employee outcomes was presented and analysed with existing theoretical support. Third, HPWS and employee outcomes links were reviewed using extant literature and empirical findings, which then lead to the proposal of two employee-level mediating factors: on-the-job embeddedness and job-based psychological ownership; and two employee-level moderating mechanisms: inclusive leadership and professional identity. Finally, this chapter closed with the development of each hypothesis for this study by offering strong theoretical and empirical evidence, and then presenting the proposed conceptual framework of this study.

Chapter 3

Methodology

3.1 Introduction

This chapter explains the research methodology that was employed for this study. First, it outlines the research paradigm, design and approaches adopted for this study. Second, the study population and sampling method and information on how the sample size was chosen are described. This section also includes some contextual background of the healthcare sector of Sri Lanka. Third, this chapter presents the data collection method, measures and instruments. Moreover, the data collection process for the pilot and main survey is discussed. The data analytical approaches are then presented. Fourth, the ethical considerations and approval information are described. Finally, this chapter discusses the limitations of the study and provides a summary.

3.2 Research Philosophy and Paradigms

In conducting social science research, there are guiding principles, often referred to as "research paradigms", which provide a guiding framework for research design. Bryman (1998, as cited in Emma, Alan, & Harley, 2018, pg. 34) defines the research paradigm as a group of beliefs and dictates that guide the researchers as to how the research should be carried out and how the results should be interpreted. Thus, paradigms guide the researchers at all stages of the study, from the initial research objectives to collecting, analysing and interpreting data. Moreover, paradigms help the researchers hold a set of beliefs and thinking patterns that influence the researcher's behaviour in conducting research (Antwi & Hamza, 2015; Jonker & Pennink, 2010). Although research paradigms guide the researchers in undertaking research, there is no specific research paradigm outlined in the social science research (Guba & Lincoln,

1994). However, scholars suggest that a research paradigm has three common elements: epistemology, ontology and methodology (Corbetta, 2003).

Epistemology explains the nature of knowledge and considerations that can be obtained via investigation procedures, by which the researchers understand reality and truth (Creswell, 2009; Hirschheim, Klein, & Lyytinen, 1995). Ontology is connected with the nature of reality and people, and the world (Hudson & Ozanne, 1988). In particular, ontology informs nature, truth and reality as understood by researchers (Goldkuhl, 2012). The methodology describes how a researcher chooses methods that can be practically possible; choosing such research methods solely depends on the researcher's views and perspectives (Emma et al., 2018). The researcher needs to make a decision regarding which paradigm they will need before drawing inferences from the study sample (Creswell, 2009). There are two philosophical paradigms that are primarily used: interpretivism and positivism, as explained below.

Interpretivism and Positivism Paradigms

The concept of interpretivism is commonly accepted in social research. Ontologically, interpretivism explains a social process whereby social reality can be changed over time and in context due to the individual differences in views and perceptions regarding the nature of reality (Eriksson & Kovalainen, 2008). Epistemologically, interpretivism explains why each researcher's experiences and views are different and interpreted based on the context (Wahyuni, 2012). Generally, in the interpretivism paradigm, qualitative methods can be used to gather, investigate and analyse research data (Hirschheim & Klein, 1992).

Positivism explains the existence of one absolute truth and that this truth can be perceived and quantitatively documented (Anderson, 1983). Ontologically, positivism can be described as absolute truth that can be used to resolve problems, based on objective measures, and is

explained through social nature (Wahyuni, 2012). Epistemologically, positivism involves the deductive testability of current theories using human observations in order to develop and confirm hypotheses (Neuman, 2011). This thesis adopted the positivist research approach. The main reason for adopting this approach is it completely fitted with the current study research problems. Positivists argue that knowledge can be accumulated through observing the absolute truth to solve problems, based on objective measures (Healy & Perry, 2000).

Selection of Positivist Approach

As this aim of this study is to investigate an objective area of HPWS and employee outcomes, it needs to be established via reliability and validity confirmations, rather than realistic views. The positivist research approach enables the researcher to conduct research based on a deductive and structured method. Previous researchers have applied a positivist research approach to examine the HPWS-outcomes relationship (Ang et al., 2003). As this study involved testing hypotheses, quantitative methods were used within the positivist paradigm to answer the research questions of this study. The systematic methods and techniques adopted in the positivist approach allow for the comparison of many observations to generalise the findings, mainly studying the participants' behaviour in the short term (Wahyuni, 2012). This study examines the associations between the employees' perceptions of HPWS and their effects on employee outcomes on a positivist research paradigm.

The main objective of this research is to assess theoretically the associations between employees' perceptions of HPWS and individual employee outcomes through several defensible hypotheses. Since the study involves investigating the relationship among research constructs, a correlational study that allows a field study was suitable (Sekaran & Bougie, 2010). Moreover, examining such a single study approach leads to answering research

questions for this study, which both examined the links between employees' perceptions of HPWS on employee outcomes, and, also, through some individual mediating and moderating mechanism at a given point in time, developed a more complex model of the associations between the constructs. Furthermore, employing a single study method allows for the collection of data from a large sample of respondents; this data is validated using sophisticated statistical testing. Thus, this study was anchored on a positivist research paradigm, based on measurable objectives to address the research questions.

The next section will describe the research design, methods and approaches that were adopted to achieve the objectives of this study.

3.3 Research Design, Methods and Approach

The quantitative research design is mainly used in the positivist research paradigm. This study adopted a quantitative approach and a cross-sectional design. Cross-sectional surveys are normally conducted at a given period of time, whereas longitudinal surveys occur at several time periods and, as such, enable researchers to observe the changes in the research constructs that are being examined (Bell et al., 2018; Bryman & Bell, 2015). However, conducting longitudinal studies involve more costs, time and effort, which sometimes leads to it being practically impossible to conduct such surveys (Bell et al., 2018). On the other hand, cross-sectional surveys are easy to conduct, whether they are of either a quantitative or qualitative nature (Bryman & Bell, 2015). This study adopted quantitative and cross-sectional surveys due to the time, resource and cost constraints.

When developing a research strategy, there are two main strategies that can be considered: quantitative and qualitative. Quantitative research is a research strategy that emphasises

quantification in the data collection and analysis of data. It also entails a deductive approach to the relationship between theory and research, in which the emphasis is on the testing of theories (Bell et al., 2018). Qualitative research (inductive approach) is a research strategy that usually emphasises words and images, rather than quantification, in the collection and analysis of data (Bell et al, 2018). This research was associated with a deductive approach. Based on this approach, the researcher, on the basis of what is known about a domain and the theoretical considerations within it, deduced a hypothesis (hypotheses) that were subjected to empirical testing (Bell et al., 2018). Figure 3.1 shows the process of deduction.

The quantitative research approach has been adopted for this study, as this approach allowed the researcher to investigate how one phenomenon affected the associations with other phenomena (Bell et al., 2018). This study was also grounded on explanatory research, as this research attempted to explain how employees' perceptions of HPWS predict employee outcomes, and whether these expected relationships are impacted by other employee attitudes, such as on-the-job embeddedness and job-based psychological ownership. Moreover, choosing the quantitative approach for this study allowed the researcher to use the self-administered questionnaire in order to collect the data in a quantifiable way and obtain a finding summary using statistical analytical techniques (Hittleman & Simon, 1997). Furthermore, using deductive reasoning logic, this study answered the research questions by developing and testing hypotheses that are based on underlying theories. Hence, this study used HPWS theories to unravel the *'HRM black box'* path between HPWS-employee outcomes relationships, by testing hypotheses to generalise research findings.

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│   5.  Hypotheses confirmed or   │
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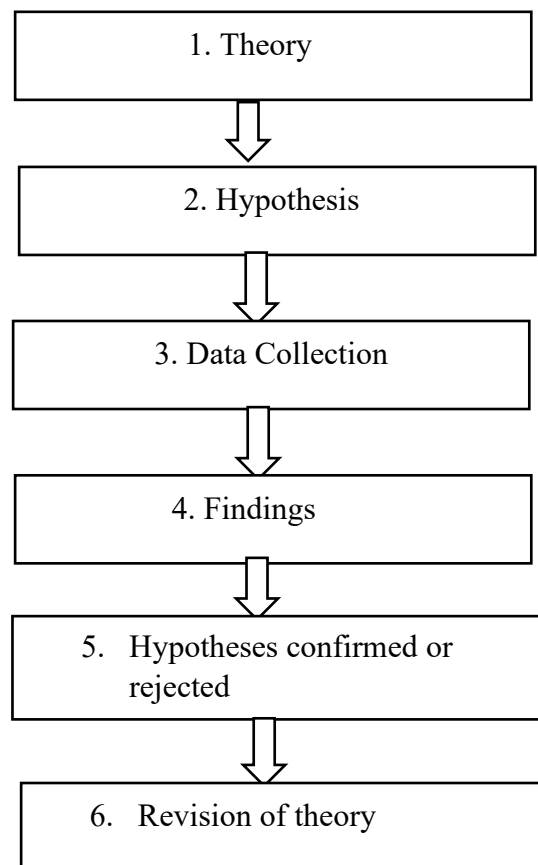
Figure 3. 1 The Process of Deduction

(Adopted from Bell et al., 2018 pg.21)

3.4 Overview of Sri Lanka

The primary purpose of this section is to provide a contextual overview of the socio-economic, legal and political context of Sri Lanka, and an overview of the national healthcare sector under study that would shape the HRM practices particularly. Moreover, this section explains the need to consider public hospitals in Sri Lanka in conducting this survey. Finally, this section discusses the adoption and necessity of HPWS practices in the healthcare sector of Sri Lanka. Finally,

Overview of the socio-economic, legal and political context of Sri Lanka

Sri Lanka is a developing country in the South-Asia region with a population of 22.16 million (Central Bank Annual Report, 2021). It is a beautiful island situated in the Indian Ocean, also known as the 'Pearl of the Indian Ocean, with its abundant natural resources and strong cultural heritage. Before 1972, it was called 'Ceylon' (WHO, 2017). It has a length of 433 kilometres and 226 kilometres wide, and covers an area of 65,610 square kilometres. (Central Bank Annual Report, 2021). The scientific evidence shows that ancient human settlements were found 125,000 years ago in Sri Lanka. However, it has a documented history of over 3000 years. Indigenous Sinhalese and Tamil Kings ruled ancient Sri Lanka. Historically, Sri Lanka has occupied a strategic location due to its geographical location and natural treasures, including its natural harbour. These assets attracted many colonial nations. As a result, the Portuguese (1505-1658), Dutch (1658-1796) and British (1796-1948) established their colonial rule in Sri Lanka. Finally, Sri Lanka was granted independence from the British in 1948. Following independence, there was a civil war between two ethnic groups for over three decades, ending in 2009.

Sri Lanka has been a democratic socialist republic since 1978. The President vests executive powers on the recommendations of the Prime Minister and Cabinet of Ministers (WHO, 2017). Moreover, the legislative powers are exercised by the Parliament. Judicial power is vested in the Judiciary, consisting of different stages: Supreme Court, High Court, District Courts, Magistrate's Courts and Primary Courts (WHO, 2017).

Culturally, Sri Lanka is a multiethnic and multicultural country; the majority are Sinhalese (74.9%), followed by Sri Lankan Tamil (11.2%), Indian Tamil (4.2%), Moors (9.2%), and others (0.5%). Sinhala is the official language, while Sinhala and Tamil are national languages

(WHO, 2017). English is considered one of the recognised second languages and is mainly used in private and government organisations in Sri Lanka. Most undergraduate and postgraduate programmes are conducted entirely in English in Sri Lanka.

Sri Lanka evidences some excellent economic and social indices. According to the Central Bank Report (2021), the Gross Domestic Product (GDP) was US $ 84.53 billion, and the Gross National Income (GNI) per capita was US $ 3815, where agriculture, industry and services contributed to GDP. Moreover, Sri Lanka recorded an unemployment rate of 4.7 % to 5.1% between 2015 and 2021. The Human Development Index (HDI) of 0.782 was attained in 2017, with a rank among 189 countries, evidencing that Sri Lanka had a high human development index compared to other South Asian countries (Central Bank Report. 2021).

Sri Lanka also demonstrated a positive index regarding physical, social, and financial infrastructure facilities. For example, according to the Central Bank Report (2021), the electrification level (2016) was 99.3%, and telephone and internet penetration per 100 persons were 148.1 and 100.4, respectively. Significantly, 94.4% of people have access to safe drinking water. Sri Lanka also demonstrated excellent education indices. As a result, the primary net enrolment rate and Age-specific enrolment ratio (grade 1-9) were 94.4% and 94.8%, respectively. The student/teacher ratio at the school and university levels were 16 and 19.7, respectively. Moreover, 62.4% of students who completed their Advanced Level were eligible for university admission. The government also spent 1.8 per cent of its GDP on education.

The public healthcare sector provides free health services to all citizens in Sri Lanka. Sri Lanka has continually proven to be a high performer in providing excellent health outcomes compared to other lower-income and middle-lower-income countries (Withanachchi, Uchida,

Nanayakkara, Samaranayake, & Okitsu, 2007). According to the Central Bank Report (2021), the crude birth and death rates per 1,000 persons were 12.9, 7.4 and 7.5, respectively. Additionally, the infant mortality rate was 7.5 per 1000 live births in Sri Lanka. In achieving such optimal outcomes, the Sri Lankan universal free access to education from primary to graduate levels was also a valuable contributor. Providing free and equal education opportunities for all Sri Lankan citizens led to a high literacy rate, i.e. 93% in 2020 (Central Bank of Sri Lanka, 2021). The increased access to free education also leads to enhanced, effective health education among girls and women, which eradicates maternal and infant mortality. Furthermore, developments in road access and advancements in telecommunications access for all people, combined with free and quick access to public hospitals, have enabled significant improvements and efficiencies in access to patient care.

The following section outlines the functions, structure, and employees of the healthcare sector of Sri Lanka, which provides the basis for undertaking this study among public hospital employees in Sri Lanka.

Healthcare Sector of Sri Lanka

Sri Lanka has adopted a pluralistic healthcare system. It practises allopathic medicine and some alternative traditional medicine, including Siddha, Ayurveda, Unani and other traditional medicines. British colonial rule led Sri Lanka to develop an allopathic health system and become the leading healthcare service provider to all people in Sri Lanka. Although both government and private sector provide healthcare services to Sri Lankan citizens, public health institutions are the dominant, comprehensive service providers throughout the country (WHO,2017). They provide health services, free of charge, to all citizens of the country. Moreover, Sri Lanka continuously demonstrates good health outcomes at comparatively low

cost. Remarkably, the GDP spent on healthcare services is below 4% (WHO, 2017). Moreover, the public sector, allopathic healthcare system covers curative and preventive healthcare via a decentralised management system. On the other hand, private healthcare institutions charge for health services and provide services according to market demand.

According to the Ministry of Health (2020), 1,103 Curative public health care institutions include divisional hospitals, primary medical care units, and only 141 private health institutions in Sri Lanka. Government hospitals were established to cover the island-wide network over nine provinces and twenty-five districts. They have a bed strength of 77,315. However, more than 60% of private hospitals were established in metropolitan and urban areas such as the Western provinces. Most significantly, there are no private hospitals in some rural districts. Private hospitals deliver 135,000 in-ward patient care services, representing only 2% of the total admissions in public hospitals in Sri Lanka. As Sri Lanka allows health professionals to engage in dual practice, most healthcare professionals work full-time in government hospitals and part-time in private practice. As a result, 99% of consultants and 83% of medical officers are also working in private sector hospitals (Medical Statistics Unit, 2017).

The public health care system of Sri Lanka is currently governed by the Central Ministry of Health and nine provincial Ministries of Health. The Central Ministry is accountable for national healthcare policy development, recruitment and training of most health employees, and the administration of most healthcare workers (WHO,2017). However, nine provincial health ministers are responsible for health care services for each province. The State Healthcare Service has a total of 123,845 human resource capacity (Ministry of Health, Sri Lanka, 2015). Most employees are distributed in the metropolitan area, i.e.. the Western province. However, healthcare professionals are also allocated to other provinces on a reasonable basis. The Eastern

and Northern provinces of Sri Lanka have also been allocated many employees, in addition to the Western province.

Considering the above healthcare structure and functions in Sri Lanka, this study chooses healthcare professionals from curative public health institutions, as they are most suitable to test the study constructs of this research. Furthermore, although the sample frame should comprise all healthcare professionals in Sri Lanka, it is not feasible to include all healthcare professionals (Sekaran & Bougie, 2010). Thus, five hospitals from the three provinces were chosen to cover the data from healthcare professionals that represented the metropolitan, urban and rural areas of Sri Lanka. This enables generalising results to achieve the objectives of this study.

Necessity of HPWS in healthcare sector of Sri Lanka

The healthcare sector of any country is a labour-intensive industry requiring the best human resource management practices to deliver healthcare services effectively (Stanton, 2008). As discussed above, Sri Lanka continuously achieves good health outcomes with limited resources. Therefore, the healthcare employees of Sri Lanka mainly contribute to achieving good health outcomes in this country. Moreover, adopting healthcare organisations must focus on providing the best human resource management practices to recruit and retain healthcare staff (Becker & Gerhart, 1996). Sri Lanka currently practices most best HRM practices to maintain its health professionals. For example, medical officers with SLMC registration are recruited in public services after completing required qualifications.

Moreover, other healthcare professionals, such as nurses, also require proper undergraduate degrees and training in their respective fields to be employed in public health institutions. The

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Ministry of Health manages staff deployment on the basis of merit. Moreover, employees are given attractive pay and benefits, including purchasing vehicle permits. Foreign scholarships and training are provided for appropriate healthcare professionals to enhance their knowledge and skills. Moreover, once an officer completes 20 years of service is eligible for retirement. Healthcare professionals are allowed to undertake dual practices at private institutions as well. Thus, how the adoption of best HR practices of public health care institutions has an impact upon the best health performance outcomes needs further investigation (WHO, 2017).

HPWS have been studied in diverse contexts: for example, manufacturing (Appelbaum, Bailey, Berg, Kalleberg, & Bailey, 2000); public companies (Zhang, Di Fan, & Zhu, 2014); indigenous firms (Min, Zhu, & Bambacas, 2020); banking sector (Abbasi, Shabbir, Abbas, & Tahir, 2021); health care sector (Ang, Bartram, McNeil, Leggat, & Stanton, 2013; Kloutsiniotis & Mihail, 2020); hospitality industry (Murphy, Torres, Ingram, & Hutchinson, 2018) or even muti-industries (Van De Voorde & Beijer, 2015). However, extant literature points out the need for HPWS studies at the employee level in the healthcare sector. Significantly, there is a need for HPWS studies in the healthcare sector of all developing nations. For example, Ang et al. (2013) surveyed Australian hospital employees and managers. They found that employees' perceived HPWS only leads to a greater level of employee engagement and satisfaction and to a lower level of intention to leave. Another study was conducted among nurses and doctors of Greek regional hospitals and found that HPWS has had a significant positive impact on employee outcomes such as job satisfaction, job engagement and affective commitment, and also had a negative impact on employee intention to leave hospitals. (Kloutsiniotis & Mihail, 2017). In order to fill the contextual gaps, this study is intended to be conducted on the healthcare professionals in Sri Lanka.

3.5 Target Population, Sampling and Sample Size

This section discusses the target population, sampling framework and how the sample size was determined. This section also describes the justification for selecting the sample and how the sample size was determined. It also addresses the reason for selecting stratified random sampling.

3.5.1 Target Population and Sampling Frame

Population refers to the whole group of people, events or things of interest that the researcher desires to scrutinise (Sekaran, 2013). The target population for this research was all the healthcare professionals who perform the role of direct patient care in the health setting of public hospitals in Sri Lanka. These employees were considered, because they are knowledgeable and suitable to test in relation to the constructs of interest in this study. Recent studies have also considered a similar group, which consisted of nurses as a majority, followed by medical doctors and other health professionals in their studies (Kloutsiniotis & Mihail, 2018; Mitchell et al., 2015). According to the Ministry of Health of Sri Lanka (2016), the total number of healthcare professionals who worked in the hospital-based healthcare setting in 2016 was 49,773. Table 3.1 shows the healthcare professional categories that represent the study population.

A sample is a subset of the population, and sampling is the process of picking an adequate quantity of elements from the population to ensure that the sample can generalise properties or characteristics to the population elements (Sekaran, 2013). The main inclusion criterion used to decide the sample of this study was healthcare professionals incorporating the role of direct patient care in the hospital health setting in Sri Lanka. All other categories of healthcare

employees were excluded from this survey. Thus, a total of 49,773 were included in the population for this research.

Table 3. 1 Healthcare professionals working in curative care services

Categories of Healthcare professionals working in curative care services	No.
Specialists in curative care services	2102
Hospital Medical Officers	12544
Hospital Dental Surgeons	1145
Nursing Officers	32330
Radiographers	607
Physiotherapists	500
Speech Therapists	70
Occupational Therapists	111
Dental Therapists	364
Total	**49,773**

(Source: Health Information Unit, Ministry of Health, Sri Lanka, 2016)

3.5.2 Determination of Sample Size

The sample size needs to be determined during the design of the survey. The sample size is calculated based on the following factors: sampling error, population size, confidence level and estimate of the response rate (Chuan & Penyelidikan, 2006). Two methods were followed to determine the sample size for this study. First, using Raosoft's sample size calculator at a 5% margin of error, 95% confidence level and an estimated 50% response rate, it was found that the sample size was 382 (Raosoft, 2010). Moreover, in order to calculate the sample size for this study, the Krejcie and Morgan (1970) sample table was used, which determined the minimum sample as 381. Thus, the sample size was determined as 400 for this study, as this

number was confirmed as adequate and manageable in data analysis. The sample size is generally acceptable for PLS-SEM comprehensive analysis (Hair, Ringle, & Sarstedt, 2011).

3.5.3 Choosing the Sampling Technique

The business researcher may use either probability or non-sampling techniques when they choose a sample. The non-probability sampling technique does not require any systematic procedures to select the sample; instead, it can be selected based on researchers' preferences and convenience. These sampling techniques include convenience, snowball, purposive or quota sampling methods (Bell et al., 2018). Probability sampling involves a systematic or scientific way of collecting data and this sampling method confirms the equal chance of a respondent of being selected from the sample (Kothari, 2004). These sampling techniques are simple random, stratified random and systematic sampling methods (Bell et al., 2018).

This research adopted stratified random sampling under the probability sampling techniques. Stratified random sampling was selected for this study as this technique allows the researcher to split the population into subgroups called strata and select the sample from those strata. This research used geographical locations to choose three strata. Eastern, Western and Northern provinces were selected as strata and then the simple random sample method was used to choose the sample from the strata (Bryman & Bell, 2015). According to Bryman and Bell (2015), using stratified random sampling offers a number of benefits. First, it helps to choose the sample that represents most sample items, particularly in a large population. Second, this sampling technique provides reliable statistical accuracy when selecting the sample. Moreover, this sampling technique is also cost-effective in terms of the finances, time and effort of the researcher.

3.6 Data Collection Procedure

This section describes the data collection method and the operationalisation of the study constructs. In addition, this section presents the instrument reliability and validity. The data collection process, both in the pilot and main survey, are also explained.

3.6.1 Survey Instrument

As a primary source of data, this survey used a self-administered paper-based questionnaire to collect data at all stages. The reasons for adopting the paper-based survey were: it is the most common method in Sri Lanka to collect data; it increases the response rates; and follow-up activities are more comfortable. There were issues in collecting data from online surveys or mailed questionnaires, as there was limited internet access for all respondents and there were considerable postal delays in sending and receiving questionnaires. Moreover, choosing a quantitative methodology allows researchers to collect data from a large sample of respondents from different geographical areas, and enables them to test statistically the study's hypotheses and generalise the study findings (Walsh, 2001; Cooper & Schindler, 2011; Bell et al., 2018). Given these factors, this study adopted a self-administered survey to gather more data and offer a generalisation of the results.

In addition, the secondary sources of data for this study were collected from published reports and relevant hospital publications and magazines by the Ministry of Health, the Central Bank of Sri Lanka, the World Bank, and websites of the Ministry of Health and other relevant Sri Lankan websites.

3.6.2 Conducting Surveys

The surveys for this research were undertaken in three phases. Before the main survey, a pilot test was conducted. The pilot survey questionnaire contained sections that represented information on personal, independent, mediating, moderating and dependent variables, and control variables. After further refining the survey instrument, based on the pilot survey's outcome, the main survey was conducted in two phases in order to reduce the common method bias. Thus, for the main survey, the first questionnaire contained information on personal and independent variables (employees' perceptions of HPWS), mediating variables (on-the-job embeddedness and job-based psychological ownership), moderating variables (inclusive leadership and professional identity) and a control variable of personality. However, the second questionnaire only contained information on three dependent variables (employee job satisfaction, motivation and intention to leave).

3.6.2.1 Pilot Survey

The purpose of the pilot survey was to invite comments about the appropriateness of the survey statements in the questionnaire (e.g. its length, layout, format and the wording of the questions). These comments were used to further refine the final questionnaire. For this purpose, 40 pilot questionnaires were issued to the healthcare professionals in Sri Lanka and 33 questionnaires were received back. There is little agreement in the current literature on determining the appropriate sample sizes for conducting pilot surveys; the determination of the sample for such a pilot study depends solely on the purpose of conducting such a survey (Johanson & Brooks, 2010). Johanson and Brooks (2010, pg. 399) suggest that 30 representative participants from the population interested in a preliminary survey or scale development constitute a reasonable minimum sample size. Thus, this present study included enough participants for the pilot survey to further refine the survey instruments.

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Qualitative and quantitative analyses were undertaken to analyse the pilot responses. In the qualitative analysis, all minor comments were analysed and suggested changes were considered.

Quantitative analysis was performed via SPSS and PLS-SEM. Data screening that included identifying missing data and visual inspection of the responses was performed. The researcher analysed the missing data using SPSS and no missing values were found for 33 respondents. In addition, the researcher reviewed the responses of the questionnaire and found that no respondent had selected either 1 or 7 for all questions. With regard to the item 'C9' under job-based psychological ownership, the reverse code for this item indicated that most respondents provided the value '1'. This may have been due to the question being pitched as a negative statement. The qualitative analysis also noted that some respondents responded to the C9 statement opposite to C2. Therefore, it was decided to remove C9 (I feel little ownership over my job ®), as this statement was also a possible cause of confusion in the answers and may have affected the overall quality of the data.

After screening the pilot survey data using Smart- PLS, the pilot survey data was analysed and discussed, along with its internal consistency reliability and discriminant validity. According to the results as shown in Table 3.2, Cronbach's Alpha for all constructs is above the threshold (0.70), therefore the Cronbach's Alpha for all of these constructs is acceptable. The Composite Reliability also shows that the values for all constructs are at satisfactory levels as they exceed the thresholds. Moreover, as shown in the table below, the Average Variance Extracted (AVE) for seven constructs exceeds 0.6, except for Employees' perceptions of High Performance Work Systems. However, employees' perceptions of HPWS is closer to 0.6.

Moreover, three measures were used to determine the discriminant validity: cross-loading, Fornell-Larcker Criterion and Heterotrait-Monotrait ratio (HTMT). All three criteria achieve the satisfactory level of discriminant validity.

Table 3. 2 Construct Reliability and Validity

Constructs	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Employee Motivation	0.854	0.901	0.628
Employees' perceptions of High Performance Work Systems	0.918	0.924	0.592
Inclusive Leadership	0.879	0.872	0.604
Intention to Leave	0.931	0.839	0.641
Job Satisfaction	0.813	0.871	0.621
Job-Based Psychological Ownership	0.893	0.919	0.612
On-the-Job Embeddedness	0.885	0.871	0.650
Professional Identity	0.953	0.949	0.705

(Source: Survey Data)

Thus, by considering the qualitative and qualitative analysis of the pilot survey, minor changes were made to the survey items and, as per the above discussion, one item (C9) from the job-based psychological ownership was removed from the scale.

3.6.2.2 Main Survey

The main survey data was collected from five public hospitals in Sri Lanka, representing three provinces: Western, Eastern and Northern. The main data collection for this research was undertaken in two phases in order to reduce common method bias. In the first phase, the researcher issued the first questionnaire, which consisted of information relating to demographic details and an independent variable (Employees' Perception of HPWS), mediating variables (job-based psychological ownership and on-the-job embeddedness) and

moderating variables (inclusive leadership and professional identity). In the second phase, the researcher issued the second questionnaire two weeks after issuing the first questionnaire. The second questionnaire consisted of information regarding dependent variables (employee job satisfaction, employee motivation and employee intention to leave). The first and second questionnaires for the main survey are annexed in Appendices 1 and 2, respectively. Despite the time lag data, this study used some other methods to minimise the common method variance, as suggested by Podsakoff et al. (2003). This questionnaire combined both the positive and negative items in the questionnaire design, and the questionnaire sections were mixed. Moreover, statistical tools were employed, such as Harman's single factor analysis.

In the first phase, the researcher issued the first 400 paper-based questionnaires among the target population for this research. Two weeks after issuing the questionnaires, the researcher collected 347 completed questionnaires from the sealed box that was situated at a central point in the hospital. At the same time, the researcher distributed the second paper-based questionnaire to the particular respondents who voluntarily completed the first questionnaire. After two weeks, the researcher collected only 341 questionnaires from the sealed box. This was because some respondents were on long service leave or received transfers to other hospitals.

In order to ensure that both questionnaires were completed by the same person, codes were used. For example, the first questionnaire was coded 'F001' and the second questionnaire was coded 'S001', where 'F' represents 'First', 'S' represent 'Second', and '001' represents the fictitious employee number. Thus, the student researcher placed the codes utilising the external stickers at the top corner of the participant information sheet. However, soon after collecting and matching both questionnaires, the codes of all respondents were immediately destroyed.

3.6.2.3 Survey Language

The survey was drafted and issued to the respondents in English. This was because the target population of healthcare professionals can read, understand and comprehend English: this language is widely used and understood by healthcare professionals in Sri Lanka. The healthcare professionals there use English as an official language, policy documents are written in English and meetings are conducted in that language. Moreover, all healthcare professionals obtain their higher education and relevant training, including foreign training, entirely in English.

3.6.2.4 Response Rate

The 400 first paper-based questionnaires were issued among the target population for this research. From this, 347 first paper-based questionnaires were completed and returned. Next, 347 second paper-based questionnaires were issued to those particular respondents who voluntarily completed the first questionnaire and 341 of those were returned. After excluding 24 incomplete questionnaires and two straight line pattern questionnaires, the final sample included 315 questionnaires, representing 78.75%.

3.6.3 Operationalisation and Measures

In specifying the measurement model for this study, a questionnaire was developed employing validated measures from the existing research literature, drawing from studies that have been published in top academic journals. A summary of these measures and their sources is outlined below. The questionnaire consisted of eight core constructs operationalised as: employees' perceptions of HPWS; job-based psychological ownership; on-the-job embeddedness; inclusive leadership; professional identity; job satisfaction; employee motivation; and employee intention to leave. For each of these measures, already validated instruments were

adapted to suit the goals of this study (Holtom & O'neill, 2004; Van Linn & Pierce, 2004). Further, all these survey instruments were quantitative in nature and all the items in the questionnaire, except for the demographic questions, were measured using a 7-point Likert scale (where 1= strongly disagree and 7=strongly agree).

Employees' Perceptions of HPWS

Employee perceptions of HPWS is the main independent variable for this study. The research adapted already validated 32 items to measure employee perceptions of HPWS (Datta et al. 2005; Zacharatos et al., 2005; Mihail & Kloutsiniotis, 2016). These items were also used in measuring employees' perceptions of HPWS in healthcare organisations (Mihail & Kloutsiniotis, 2016; Ang et al., 2003). Previous studies also found a good Cronbach's alpha value of 0.915 (Mihail & Kloutsiniotis, 2016). This HPWS instrument assesses how individuals experience and interpret a bundle of HRM practices (one that typically captures ability-, motivation- and opportunity-enhancing practices). Table 3.3 shows how this study conceptualises the HPWS based on ability-, motivation- and opportunity HR practices.

Table 3. 3 A Bundle of HRM Practices

HRM Bundle	HR Practices	Previous Studies
Ability-Enhancing HR Practices	1. **Selective Staffing** (sample item is "Only the best and trained people are hired to work in this hospital"). 2. **Extensive Training and Development** (Sample item is "Employees of this hospital have been trained in a variety of skills (e.g. work-rotation").	Mihail & Kloutsiniotis, 2016; Ang et al., 2013

Motivation-Enhancing HR Practices	3. **Internal Mobility** (Sample item is "Employees of this hospital hold non-entry level jobs (highest-level jobs) as a result of internal promotions (as opposed to hired from outside of the public hospital system").	Mihail & Kloutsiniotis, 2016; Zacharatos et al., 2005
	4. **Performance Management and Compensation (**Sample item is "Employees of this hospital receive formal performance appraisals and feedback on a routine basis").	
	5. **Employment Security** (Sample item is "Job security with this hospital is almost guaranteed").	
Opportunity-Enhancing HR Practices	6. **Job Clarity** (Sample item is "The duties of this hospital employees' jobs are clearly defined").	Mihail & Kloutsiniotis, 2016; Zacharatos et al., 2005
	7. **Participation in Decision-Making and Communication** (Sample item is "Employees of this hospital participate in decision-making with regard to work-related issues").	

Job-based Psychological Ownership

The study adopted eight items from Van Linn and Pierce (2004), and Morey (2017) to measure job-based psychological ownership. This instrument assesses the extent to which employees sense feelings of possession, being psychologically tied to his or her job. The sample item is "I sense that this job is MINE".

On-the-Job Embeddedness

The on-the-job embeddedness construct was measured using 12 items adapted from previous studies (Holtom et al., 2006; Lee et al., 2004; Mitchell et al., 2001). This instrument assesses the extent to which individuals are embedded with the fit, links and sacrifice of their jobs

(Mitchell & Lee, 2001). The sample item is "My job utilises my knowledge, skills and talents well".

Inclusive Leadership

The study adapted nine items for measuring inclusive leadership using Carmeli et al. (2010) and Mitchell et al. (2015), which assess the extent to which employees experience openness, accessibility and availability in their interactions with his or her leader. The sample item is "The leader of our unit is open to hearing new ideas".

Professional Identity

The study adapted an already validated measure for the professional identity of eight items, which assesses the extent to which the employee is professionally identified with his or her job (Dobrow & Higgins, 2005; Nembhard & Edmondson, 2006). The sample item is "I feel proud to be a member of my profession".

Employee Job Satisfaction

Job satisfaction was considered as the dependent variable for the study. The previously validated measures (five items) were used to assess the extent to which the employee feels satisfaction in his or her job (Judge et al., 1998). The sample item is "I feel fairly well satisfied with my present job".

Employee Motivation

Employee motivation is another dependent variable. The study adapted six items for measuring employee motivation using Warr et al. (1979). The sample item is "I take pride in doing my job as well as I can".

Employee Intention to Leave

Employee intention to leave was also considered as a dependent variable for this study. It measures how strongly employees have feelings to leave their jobs. Three validated items were used in this study to measure the employee intention to leave (Mobley et al.1978). The sample item is "I often think of quitting the hospital".

Control Variables

Demographic variables may have an impact on the results of the study. Thus, some control demographic variables (such as age, gender and number of years working in the profession) were included. Moreover, the variable of employee personality was also considered as a control variable for this study.

3.7 Data Analysis Techniques

As this study aimed to predict the employee outcomes and adopted a reflective measurement model, PLS-SEM was the best statistical analytical technique to examine the measurement model and validate the hypothesised associations in the research model (Hair et al., 2012). Partial Least Squares-Structural Equation modelling (PLS-SEM) was used to analyse the data. The reasons for employing PLS-SEM are: 1) there is an increased use of PLS-SEM in HRM research; 2) it operates efficiently in a small sample size; 3) the researcher is able to use formative and reflective measures; and 4) it is the best tool for measuring the complex model (Hair et al., 2011; Ringle et al., 2018).

The next section explains the statistical tools and discusses how the data was analysed using various statistical techniques.

3.7.1 Preliminary Data Analysis

Excel and SPSS 27.0 were employed to carry out the preliminary data analysis. It is important to conduct the preliminary analysis before the main analysis to further screen the data that is free from errors and thereby ensure the data quality. This preliminary analysis involved identifying missing values, identifying and removing any suspicious response patterns, and examining data distribution. The data was checked manually to assess whether the respondents duly completed all the data. Furthermore, descriptive statistics and frequency distributions obtained from SPSS 27.0 were used to clean the data set. After detecting the suspicious pattern of the data set, a visual inspection of each questionnaire was conducted to identify and correct any other straight-lining patterns. The normality of the data was further assessed using the skewness and kurtosis value. The skewness value should be -2 to +2 and the kurtosis value needs to be between -7 to +7 (Curran, West, & Finch, 1996).

After cleansing the data, the frequency analysis for the demographic profile of study participants was presented using SPSS 27.0. Moreover, SPSS 27.0 was used to produce the descriptive statistics for research constructs and correlations among such variables.

3.7.2 Model Analysis

The model analysis is conducted in two stages: measurement model and structural model evaluation. Measurement model analysis ensures the construct measures are valid and appropriate; on the other hand, the structural model evaluation involves investigating the suitability for confirming the relationships between latent constructs (Hair, Ringle, & Sarstedt, 2011).

Assessing the Measurement Model

This study adopted the reflective measurement model, such that reliability and validity tests were conducted to assure the quality of the construct items (Hair *et al*., 2011). Smart PLS was used to obtain the metrics, such as internal consistency reliability, convergent validity and discriminant validity, for reflective model assessment.

Internal consistency and indicator reliability (outer loadings) metrics were utilised to establish the reliability of the construct items. For this purpose, the metrics of Cronbach's alpha (α), Composite Reliability (CR) and Average Variance Extracted (AVE) were used. Internal consistency reliability measures the association between the indicators and constructs to see any highly correlations among such constructs (Hair et al., 2017). The traditional method of measuring the internal consistency reliability is Cronbach's Alpha in partial least squares analysis (Hair et al., 2011). Composite reliability is another effective metric in measuring the internal consistency reliability. Composite reliability scores of 0.60 to 0.70 are generally accepted in exploratory studies and, further, values between 0.70 and 0.90 can be considered as a satisfactory level in advanced research (Nunnally & Bernstein, 1994).

Measuring the indicator reliability is another important measure for evaluating the reflective measurement model, and this indicator reliability is assessed based on the outer loadings of the indicators. The outer loading of each indicator is greater than 0.70, which shows a good level. The outer loading value between 0.40 and 0.70 can also be considered. However, any outer loading of indictors' values less than 0.40 needs to be removed from the study's measures (Hair et al., 2011; Henseler et al., 2009).

In addition to the reliability tests, the convergent and discriminant validity of each construct also need to be assessed in the reflective measurement model (Hair et al., 2011). The convergent validity (CV) is commonly assessed through Average Variance Extracted or outer loadings, with a cut-off value of 0.50 (Hair et al., 2017). Discriminant validity can be assessed using Fornell–Larcker Criterion, cross-loadings of all indicators and the Heterotrait-monotrait ratio (HTMT) (Fornell & Larcker, 1981; Hair *et al*., 2011).

Evaluating Path Analysis

Once the measurement model was validated, the structural model was evaluated against some parameter estimates. Thus, the structural model was evaluated using the criteria such as variance inflation factor (VIF), path coefficient estimates and the predictive capabilities indices (Hair et al., 2017). The collinearity assessment was performed first to determine whether the model's predictors were free of any multi-collinearity issues. Each construct's variance inflation factor (VIF) was used to assess the multi-collinearity problem. When each construct's VIF values are below 5, the constructs are free from multi-collinearity issues (Hair et al., 2011).

Path coefficients and their respective t-values were used to test the hypothesised associations in the model. Based on past studies, hierarchical regression analysis was used to generate the standardised regression path coefficients (β) and to evaluate the hypothesised relationships between independent and dependent constructs (Mitchell et al., 2015). As per guidelines provided by Hair et al. (2021) and Zhao et al. (2010), mediation and moderation relationships for this study were examined utilising Models 1, 4 and 14 of SPSS 27.0 PROCESS macro (Hayes, 2003). 95% confidence intervals using SPPS 27.0 PROCESS macros with a 5000 sample were used to create statistical significance. Employing the SPSS PROCESS Macro

received much attention from current researchers, enabling the investigation of individual hypotheses in the model (Hayes, 2013).

Moreover, the bootstrapping procedure was run with a 5000 sample to obtain the confidence interval (CI) to evaluate whether the proposed hypotheses were supported. To accept the hypothesis, the CI range should not include zero (Hair et al., 2017). On the other hand, if the zero value falls within the range, the null hypothesis must be accepted. After performing the path analysis, Smart-PLS were run to obtain other vital metrics to investigate the model's predictive capabilities.

The coefficient of determination (R2) is one of the critical metrics used to determine the model's overall quality. It describes how much variance in dependent variables is attributed to all the independent variables in the model. Although the Goodness of Fit (GoF) indicator can be used to establish the model fitness, it is argued that Goodness of Fit is not a suitable measure in PLS-SEM, as SEM-PLS techniques are utilised to predict the dependent constructs. Thus, this study chose the coefficient of determination (R2) over GoF to validate a satisfactory level of predictive accuracy for the assessed model (Hair et al., 2012).

Predictive Relevance (Q2) is another for examining the predictive accuracy of the structural model. The Q2 value is generally obtained from the blindfolding procedure using Smart-PLS, only employed for the dependent variables in the reflective measurement model. Although two sub-measures of Q2: redundancy and communality, the cross-validated redundancy is considered the best index in the PLS-SEM approach as it predicts the accuracy of both the measurement and structural models. This study adopted the redundancy measure of Q2 as

redundancy to determine the predictive relevance of the endogenous variables under consideration (Hair et al., 2017).

Effect size (f2) describes the degree to which a particular independent variable contributes to a dependent variable. For example, F2 is the changed R2 when a predictor is excluded from the model (Hair et al., 2012). Moreover, the standardised root mean square residual (SRMR) is another measure used to assess the model.

3.8 Ethical Considerations

It is important to address any ethical issues that may arise during research. As the research involves human beings, ethics approval was obtained from the University of Newcastle Human Resource Ethics Committee before the data collection (the approval number is H-2019-0342). Moreover, this study obtained ethical approvals from two healthcare bodies in Sri Lanka as well (Colombo South Teaching Hospital of Sri Lanka: the approval number is PL/MO/851; and The National Hospital of Sri Lanka: the approval number is AAJ/ETH/COM/2020/FEB).

This allowed the researcher to conduct the study among healthcare professionals in public hospitals in Sri Lanka. There were several ethical considerations taken into account during and after conducting the survey: voluntary participation, informed consent, anonymity and confidentiality, and the storage of the data.

In order to address the ethical issues, the researcher firstly gave a participant information sheet (PIS) to the consenting participants. This sheet explained the objective of the research, ensured voluntary participation and provided the opportunity for the participants to withdraw from the survey at any time. Participants were also assured that the data would not be shared with or

distributed to their hospitals or any organisations. The privacy of the individual participants and individual hospitals was maintained, as no individual names or hospital names were utilised in the questionnaires. Moreover, only fictitious numbers were used as codes in the survey for the purpose of matching two questionnaires and, soon after the data was collected, these codes were destroyed. Moreover, only aggregated research findings were reported, and no individual analysis quoting participants and hospitals was included or disclosed anywhere in the thesis or publications arising from this survey. Further, the participant information sheet (PIS) and organisational information sheet (OIS) clearly explained the process such that participants' privacy would not be breached. All the collected data is stored in a secure locker with a padlock, which is located in the student researcher's separate study room. This locker can only be accessed by the student researcher during fieldwork in Sri Lanka. The data is further safeguarded via a password protected computer and the collected information will only be stored for five years after the completion of the research.

3.9 Limitations of the Study

There are some limitations identified with this study. First, this study has only considered a sample of healthcare professionals who perform direct patient care in public hospitals in Sri Lanka. Thus, this study was limited to one industry (healthcare) and to one country (Sri Lanka). Second, this study was conducted based on cross-sectional and positivist research approaches, and the data was collected at a given time, rather than a longitudinal study being conducted, due to the time, cost and researcher's efforts constraints. Third, the data was collected entirely from one source, which may have increased the common method bias. However, this study used some remedies provided by Podsakoff et al. (2013), such as time lag data, mixing positive and negative items in the questionnaire, and some statistical methods, including Harman's single factor analysis. Moreover, this study measured the high performance work systems

entirely from employee perspectives, rather than considering multi-level perspectives. More details of this study limitation are further presented in Chapter 5.

3.10 Chapter Summary and Conclusion

This chapter presents the methodology that this study adopted to conduct the survey. This study used the quantitative research approach, based on a cross-sectional and positivist research approach. Healthcare professionals who perform direct patient care were selected as the study population for this study. The surveys were conducted in three phases. First, the researcher conducted the pilot survey in order to further refine the final survey questionnaires among a small group of healthcare professionals in Sri Lanka. Based on the qualitative and quantitative analysis of the pilot survey results, the final questionnaire was further refined. The refined final questionnaires were administered among 400 healthcare professionals who work in public hospitals in Sri Lanka. The sample was selected using stratified random sampling from three provinces (Western, Eastern and Northern) in Sri Lanka. The final survey was conducted in two phases to reduce the common method bias. Furthermore, as suggested by Podsakoff et al. (2013), this study used some other methods to reduce this bias, for example, mixing the positive and negative statements in the questionnaire and statistical test.

This study adopted several statistical analytical tools, such as Excel, SPSS, Smart PLS and SPPS Macro process, to analyse the data. For hypotheses testing, this study utilised hierarchical regression analysis and the SPSS Macro Process to test the developed hypotheses. The study model explanatory power was assessed using the results obtained by SMART-PLS.

As this study involved employees, ethical approval was sought from the University of Newcastle, Australia. Furthermore, two other ethics approvals were obtained from two healthcare bodies of Sri Lanka. This study also identified some study limitations in connection to collecting data. How these limitations pave a path for future researchers will be discussed in Chapter 5.

Chapter 4

Results

4.1 Introduction

This chapter presents the results of this study and further evaluates the measurement and structural models to validate the hypothesised associations in the research model. The data analysis involved four phases. The first phase presents findings from the preliminary analysis, including handling missing data and response patterns to assure the quality of the data before conducting the measurement and path analysis. In the second phase, the demographic profile of the respondents is presented. The third phase provides descriptive statistics, with mean scores and the standard deviation of the research constructs. In the final stage, structural and measurement models evaluations are undertaken. This chapter then closes with a summary of the study findings and a conclusion.

4.2 Preliminary Data Analysis

Once the paper-based survey data was collected and the first questionnaire was matched with the second, preliminary data analysis was undertaken to ensure the data was free of error and maintained the minimum quality data standards. This was undertaken before the structural and path analysis occurred. The preliminary analysis involved missing value scanning, identifying and removing any suspicious response patterns and examining data distribution. Excel and SPSS 27.0 were employed to carry out preliminary data analysis.

4.2.1 Screening Missing Data

The first phase of the preliminary analysis involved an inspection for any missing data in the data set. Accordingly, data was checked manually to assess whether the respondents duly

completed all data. Furthermore, descriptive statistics and frequency distributions obtained from SPSS 27.0 were used to clean the data set. As a result, it was found that there were a few minor data entry errors in the data set. These were rechecked with the original questionnaires and corrected. Twenty-four questionnaires containing missing values were also found. This is because some respondents failed to mark responses for independent, mediating, moderating or dependent variable (s), which may have impacted data analysis. Therefore, a decision was made to exclude these participants from the final analysis, as missing data on these questionnaires exceeded 15% and there were a high proportion of responses missed for a particular construct (Hair et al., 2017, pg. 56-57). After excluding these questionnaires, SPSS 27 was used to produce descriptive statistics.

4.2.2 Removing Suspicious Response Patterns

In order to detect any suspicious data patterns in the data set, a visual inspection of each questionnaire was conducted. The manual checking of responses found that one respondent ticked '3' for all items and another respondent marked '1' for all items in the questionnaire. Thus, it was decided to exclude these questionnaires. After the visual inspection of data, statistical packages, including Microsoft Excel and SPSS 27, were used to analyse any other straight-lining patterns. However, no further straight-line patterns were identified. Therefore, after the data cleansing process, a sample of 315 completed questionnaires was considered for further data analysis, representing 78.75% of the total issuing questionnaires.

4.2.3 Normality of Data Distribution

To be considered a normal distribution of data, the skewness value should be -2 to +2, and the kurtosis value needs to be between -7 to +7 (Curran, West, & Finch, 1996). As per Table 4.1,

the skewness and kurtosis values are within the specified range and, thus, it was confirmed that the data distribution was approximately normal.

Table 4. 1 Skewness and Kurtosis of Research Constructs

Constructs	N	Skewness	Kurtosis
	Statistic	Statistic	Statistic
Employees' Perceptions of HPWS	315	-0.912	0.472
Job-Based Psychological Ownership	315	-1.325	2.342
On-The-Job Embeddedness	315	-1.427	2.136
Inclusive Leadership	315	-0.799	0.458
Professional Identity	315	-1.337	2.504
Employee Job Satisfaction	315	-1.524	3.666
Employee Motivation	315	-1.594	4.099
Employee Intention to Leave	315	1.058	0.028

Source: Survey Data

4.3 A Demographic Profile of Respondents

The sample for the study comprised 315 healthcare professionals from five public hospitals in Sri Lanka. This section reports the frequency analysis for the demographic profile of the study participants using SPSS 27.0. This demographic information of respondents includes gender, age, professions, tenure in the professions, tenure in the current hospitals and tenure in the current jobs.

As per Table 4.2, most of the participants were female, accounting for 60.3%, compared to males, representing 39.7% of the total sample. It is noted that nursing officers are the largest occupation group in the public healthcare of Sri Lanka, of whom the majority of nursing officers are females (Ministry of Health, 2015).

Table 4. 2 Respondents' Gender

Gender of Respondents	Frequency	Percent
Male	125	39.7
Female	190	60.3
Total	**315**	**100.0**

Source: Survey Data

The distribution of the age of the respondents is provided by Table 4.3, where the largest group of participants were aged 31-40, which accounted for 36.5%, followed by the age group 21-30, which constituted 33.3% of the total sample. Age groups 41-50 and 51-60 accounted for 17.5% and 9.8%, respectively. The smallest age group was below 21 years, which represented only 2.9% of the sample. A similar age range distribution among healthcare professionals can be observed in the public hospitals of Sri Lanka (Ministry of Health, 2015).

Table 4. 3 Respondents' Age

Age Range	Frequency	Percent
Below 21	9	2.9
21-30	105	33.3
31-40	115	36.5
41-50	55	17.5
51-60	31	9.8
Total	**315**	**100.0**

Source: Survey Data

Table 4. 4 Profession of respondents

Categories	Frequency	Percent
Doctor	89	28.3
Nursing Officer	187	59.4
Dentist	12	3.8
Radiographer	10	3.2
Physiotherapist	8	2.5
Cardiologist	3	1.0
Occupational Therapist	2	0.6
Cardiographer	4	1.3
Total	**315**	**100.0**

Source: Survey Data

The sample for this study was healthcare professionals who offer direct patient care in public hospitals. As shown in Table 4.4, nursing officers and doctors comprised a higher proportion of the total sample, accounting for 87.7%, of whom nursing officers were the largest group (59.4%), followed by doctors (28.3%). The other professional groups were relatively few in number and distributed as follows: dentists (3.8%); radiographers (3.2%); physiotherapists (2.5%); cardiographers (1.3%); and cardiologists (1%) and occupational therapists (0.6%). While the Sri Lankan public health care setting comprises a more significant proportion of nursing officers and medical doctors (accounting in combination for more than 90% of total healthcare professionals (Ministry of Health, 2015), the pattern of professional distribution was deemed reasonably representative of the total population.

Table 4. 5 Tenure in professions

Profession Tenure	Frequency	Percent
Below 1	12	3.8
2-5	116	36.8
6-10	70	22.2
11-15	49	15.6
Above 15	68	21.6
Total	**315**	**100.0**

Source: Survey Data

Table 4.5 illustrates how long healthcare professionals have been working in their professions. It is observed that the majority of participants had 2-5 years of professional experience (36.8%). Respondents with experience of 6-10 years, and more than 15 years' experience, had nearly the same profession experience, 22.2% and 21.6% respectively. Just over 15% (15.6%) of respondents had 11-15 years' experience, and only 3.8% of respondents had less than 1 year experience in their profession.

Table 4. 6 Tenure in current hospitals

Hospital Tenure	Frequency	Percent
Below 1	19	6.0
2-5	122	38.7
6-10	67	21.3
11-15	53	16.8
Above 15	54	17.1
Total	**315**	**100.0**

Source: Survey Data

Respondents' tenure in the current hospital is shown in Table 4.6. It is noted that only 19 (6%) participants had less than one year experience with their current hospitals. The majority of

participants (38.7%) had 2-5 years hospital experience. A total of 67 participants (21.3%) had

6-10 years' experience in their current hospitals, followed by those who had more than 17.1%

experience. In addition, 16.8% of respondents had 11–15-year experience in their professions.

Table 4. 7 Tenure in current jobs

Current Job Tenure	Frequency	Percent
Below 1	15	4.8
2-5	114	36.2
6-10	69	21.9
11-15	53	16.8
Above 15	64	20.3
Total	**315**	**100.0**

Source: Survey Data

Table 4.7 shows the respondents' tenure in their current jobs. A total of 114 respondents

(36.8%) had 2-5 years' experience in their current jobs, while only 15 respondents (4.8%) had

less than one year experience in their jobs. Moreover, 21.9% of respondents had 6-10 years of

job experience, 20.3% of participants had more than 15 years of work experience, and 16.8%

had 11-15 years of job experience.

Overall, most of the participants were nursing officers and females, and were aged between

31-40 years. Moreover, the majority of respondents had 2-5 years' experience in their

professions, current hospitals and in their current jobs.

4.4 Descriptive Statistics of Study Constructs

This section reports the descriptive analysis results (containing the mean values and standard

deviation) of eight research constructs, namely employees' perceptions of high-performance

work systems (HPWS), job-based psychological ownership (JBPO), on-the-job embeddedness

(OTJE), inclusive leadership (IL), professional identity (PI), job satisfaction (JS), employee

motivation (EM) and intention to leave (ITL). Moreover, correlations among these research variables have also been presented in Table 4.8. SPSS 27.0 was run to produce descriptive statistics for research constructs.

The descriptive statistics show that the respondents provided negative ratings for intention to leave while they positively responded to all seven of the other study variables. The results show that job satisfaction scores the highest mean value (6.013), followed by employee motivation (5.950); whereas the lowest mean value is for intention to leave (2.721). Employees' perceptions of HPWS scores a 5.264 mean value. In terms of employee attitudes, job-based psychological ownership and on-the-job embeddedness, they show roughly the same mean value of 5.790 and 5.785, respectively.

Table 4. 8 Correlations Coefficients and Descriptive Statistics of Research Constructs

Variables	HPWS	JBPO	OTJE	IL	PI	JS	EM	ITL
HPWS	**1**							
JBPO	.441**	1						
OTJE	.501**	.669**	1					
IL	.461**	.470**	.512**	1				
PL	.431**	.598**	.626**	.612**	1			
EJS	.270**	.474**	.483**	.380**	.551**	1		
EM	.292**	.493**	.423**	.354**	.487**	.573**	1	
ITL	-.200**	-.350**	-.386**	-.234**	-.326**	-.392**	-.373**	1
Mean	5.264	5.790	5.785	5.519	5.954	6.013	5.950	2.721
Standard Deviation	0.999	0.921	0.925	1.037	0.927	0.928	0.929	1.757
**. Correlation is significant at the 0.01 level (1-tailed).								

4.5 Model Analysis

Model analysis was conducted in two stages: first, the measurement model evaluation and second, the structural model evaluation. Measurement model analysis evaluates the

appropriateness of construct measures in terms of reliability and validity. The structural model evaluation involves examining the suitability to confirm the associations between latent constructs (Hair, Ringle, & Sarstedt, 2011). The sections below explain the evaluation process of both the measurement and structural models.

4.5.1 Measurement Model Evaluation

As this study adopted a reflective measurement model, reliability and validity tests were performed to confirm the quality of the construct items (Hair *et al*., 2011). Thus, Smart PLS was utilised to obtain the metrics for reflective model assessment. These metrics contain internal consistency reliability, convergent validity and discriminant validity.

4.5.1.1 Assessment of Internal Consistency Reliability and Indicator Reliability

Internal consistency and indicator reliability (outer loadings) metrics were used to determine the reliability of the research constructs. Table 5.9 presents the outer loadings of the indicators, Cronbach's alpha (α), composite reliability (CR) and Average Variance Extracted (AVE) for the research constructs.

Internal consistency reliability assesses the relationship between the indicators and constructs, whether they are highly correlated or not (Hair et al., 2017; Hair et al., 2011). Although Cronbach's Alpha is a traditional method of checking reliability, using partial least squares analysis, it still underestimates the internal consistency reliability of any indicators. Furthermore, because the determination of Cronbach's Alpha is based on several indicators in the model, it is also assumed that all measurement indicators are equally reliable (Hair et al., 2011). Due to these shortcomings, composite reliability is the most suitable test to use in partial least squares analysis, as this prioritises the indicators based on each indicator's reliability in

the model estimation (Hair et al., 2011). According to Nunnally and Bernstein (1994), composite reliability scores of 0.60 to 0.70 are generally accepted in exploratory studies, and, further, values between 0.70 and 0.90 can be considered to be a satisfactory level in advanced research. Thus, the measurement model of this study shows that a higher level of internal consistency reliability is achieved, as both Cronbach's Alpha and the composite reliability of values of all of the research constructs exceed the threshold value of 0.70 (See Table 4.9).

In addition to assessing internal consistency reliability, indicator reliability also needs to be considered in a reflective measurement model. Indicator reliability was thus assessed based on the outer loadings of the indicators. Generally, the outer loadings of each indicator must be greater than the value of 0.70. However, it is not necessary for an indicator with an outer loading score below 0.70 to be deleted from the scale (Hair et al., 2011). Generally, the outer loading of indictors' valued between 0.40 and 0.70 should be deleted if removing the indictor increases composite reliability such that it exceeds the threshold value. Outer loadings of less than 0.40 should be removed from the measurement scale (Hair et al., 2011; Henseler et al., 2009). Hair et al. (2017) pointed out that the indicator's outer loading score of 0.50 can be accepted. Given that the outer loadings values of all indicators of this study are above 0.60, with a higher level of internal consistency, no indicators need to be eliminated from the model. SmartPLS bootstrapping results further confirmed that the *t*-values of all of the outer loadings are above 2.58, so consequently no indicators have been removed from the model.

Table 4. 9 Outer Loadings of Indicators and Cronbach's Alpha, Composite Reliability and Average Variance Extracted of Constructs

Constructs	Items	Outer Loadings	Cronbach's Alpha (α)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Employees' Perceptions of HPWS	B1	0.612	0.962	0.965	0.462
	B2	0.753			
	B3	0.754			
	B4	0.665			
	B5	0.602			
	B6	0.680			
	B7	0.625			
	B8	0.713			
	B9	0.675			
	B10	0.627			
	B11	0.659			
	B12	0.675			
	B13	0.706			
	B14	0.603			
	B15	0.601			
	B16	0.608			
	B17	0.617			
	B18	0.637			
	B19	0.656			
	B20	0.632			
	B21	0.753			
	B22	0.744			
	B23	0.734			
	B24	0.706			
	B25	0.689			
	B26	0.706			
	B27	0.713			
	B28	0.709			

	B29	0.670			
	B30	0.741			
	B31	0.704			
	B32	0.782			
Job-Based Psychological Ownership	C1	0.706	**0.880**	**0.906**	**0.547**
	C2	0.606			
	C3	0.693			
	C4	0.753			
	C5	0.708			
	C6	0.82			
	C7	0.842			
	C8	0.763			
On-the-Job Embeddedness	D1	0.781	**0.920**	**0.932**	**0.534**
	D2	0.698			
	D3	0.784			
	D4	0.772			
	D5	0.732			
	D6	0.775			
	D7	0.670			
	D8	0.661			
	D9	0.635			
	D10	0.656			
	D11	0.768			
	D12	0.807			
Inclusive Leadership	E1	0.748	**0.938**	**0.948**	**0.670**
	E2	0.810			
	E3	0.810			
	E4	0.815			
	E5	0.814			
	E6	0.858			
	E7	0.853			
	E8	0.807			
	E9	0.846			
	F1	0.750			
	F2	0.756			

Professional Identity	F3	0.802	**0.909**	**0.926**	**0.612**
	F4	0.801			
	F5	0.771			
	F6	0.838			
	F7	0.739			
	F8	0.795			
Employee Job Satisfaction	H1	0.711	**0.868**	**0.900**	**0.651**
	H2	0.881			
	H3	0.824			
	H4	0.740			
	H5	0.864			
Employee Motivation	I1	0.750	**0.881**	**0.909**	**0.626**
	I2	0.831			
	I3	0.755			
	I4	0.761			
	I5	0.818			
	I6	0.828			
Employee Intention to Leave	I1	0.897	**0.917**	**0.948**	**0.858**
	I2	0.934			
	I3	0.949			

Source: Survey Data

4.5.1.2 Assessment of Convergent and Discriminant Validity

For the reflective measurement model, validity is assessed on the basis of the convergent and discriminant validity of each construct (Hair et al., 2011). Convergent validity (CV) refers to how an indicator of the construct is positively related to another indicator of the same construct. The CV is generally assessed through Average Variance Extracted, with a cut-off value of 0.50 (Hair et al., 2017). Outer loadings can also be used for establishing CV. The AVE values of each construct are presented in Table 4.9, which shows that the AVE scores of seven constructs exceed the cut-off value of 0.50. One construct, employees' perceptions of HPWS, shows the AVE value of 0.462, which is close to the threshold value. Moreover, according to Fornell and

Larcker (1981), the AVE of the construct less than 0.50 can still be accepted if an acceptable level of composite reliability (i.e. CR is more than 0.60) is found. Thus, it is concluded that a sufficient level of convergent validity for all constructs has been achieved.

Discriminant validity was confirmed using the Fornell–Larcker Criterion, the cross-loadings of all of the indicators and the Heterotrait-monotrait ratio (HTMT). Firstly, the measure of Fornell–Larcker claims that the square root of the AVE values of a latent construct must be greater than the highest correlations with other latent constructs in the structural model (Fornell & Larcker, 1981; Hair *et al*., 2011). Accordingly, Table 4.10 presents discriminant validity metrics for all constructs, where the square root of the AVE values for each research variable (diagonal values) is greater than the correlation values (off-diagonal elements) of the other latent constructs. Thus, discriminant validity is supported.

Table 4. 10 Fornell-Larcker Criterion

	1	2	3	4	5	6	7	8
1 Employee Intention to Leave	**0.926**							
2 Employee Motivation	-0.402	**0.791**						
3 Employees' Perceptions of HPWS	-0.209	0.313	**0.680**					
4 Inclusive Leadership	-0.231	0.362	0.466	**0.818**				
5 Job-Based Psychological Ownership	-0.344	0.458	0.472	0.425	**0.740**			
6 Employee Job Satisfaction	-0.390	0.558	0.292	0.373	0.470	**0.807**		
7 On-the-Job Embeddedness	-0.405	0.431	0.511	0.523	0.670	0.512	**0.730**	
8 Professional Identity	-0.307	0.496	0.458	0.639	0.572	0.553	0.610	**0.782**

Source: Survey Data

The second measure used to establish discriminant validity involves measuring cross-loadings of indicators. The loading of an indicator with its associated research parent construct must be

higher than its loadings with all other research constructs (Hair et al., 2011). As per Table 4.11, all indicators are above 0.60, and all indicators' loadings are greater than their loadings with all other existing research constructs. Thus, it is concluded that a good level of DV has been established.

Table 4. 11 Cross-Loadings Matrix

	HPWS	JBPO	OTJE	IL	PI	EJS	EM	EITL
B1	**0.612**	0.370	0.405	0.296	0.269	0.243	0.273	-0.240
B2	**0.753**	0.282	0.322	0.303	0.303	0.157	0.187	-0.121
B3	**0.754**	0.294	0.341	0.314	0.323	0.149	0.214	-0.167
B4	**0.665**	0.368	0.432	0.362	0.355	0.299	0.306	-0.175
B5	**0.602**	0.327	0.383	0.378	0.373	0.278	0.283	-0.175
B6	**0.680**	0.369	0.376	0.357	0.331	0.25	0.275	-0.185
B7	**0.625**	0.351	0.303	0.186	0.251	0.196	0.191	-0.142
B8	**0.713**	0.405	0.49	0.441	0.404	0.301	0.270	-0.156
B9	**0.675**	0.314	0.351	0.309	0.307	0.149	0.159	-0.045
B10	**0.627**	0.290	0.322	0.276	0.278	0.159	0.224	-0.136
B11	**0.659**	0.306	0.351	0.312	0.331	0.147	0.196	-0.163
B12	**0.675**	0.254	0.287	0.280	0.243	0.134	0.157	-0.075
B13	**0.706**	0.322	0.302	0.254	0.296	0.180	0.207	-0.131
B14	**0.603**	0.268	0.281	0.283	0.268	0.123	0.173	-0.050
B15	**0.601**	0.298	0.222	0.336	0.340	0.207	0.133	-0.144
B16	**0.608**	0.219	0.187	0.310	0.259	0.133	0.110	-0.064
B17	**0.617**	0.302	0.383	0.359	0.299	0.209	0.206	-0.074
B18	**0.637**	0.248	0.297	0.192	0.219	0.185	0.122	-0.100
B19	**0.656**	0.192	0.263	0.285	0.228	0.100	0.045	-0.065
B20	**0.632**	0.201	0.239	0.289	0.285	0.149	0.157	-0.097
B21	**0.753**	0.306	0.305	0.404	0.384	0.222	0.222	-0.135
B22	**0.744**	0.258	0.332	0.319	0.316	0.113	0.166	-0.175
B23	**0.734**	0.361	0.366	0.340	0.362	0.169	0.213	-0.159
B24	**0.706**	0.291	0.309	0.288	0.295	0.144	0.195	-0.151
B25	**0.689**	0.248	0.276	0.272	0.304	0.121	0.168	-0.103
B26	**0.706**	0.328	0.274	0.371	0.327	0.184	0.199	-0.167
B27	**0.713**	0.329	0.37	0.311	0.309	0.155	0.164	-0.094

B28	**0.709**	0.407	0.355	0.203	0.261	0.185	0.209	-0.206
B29	**0.670**	0.358	0.370	0.341	0.299	0.225	0.252	-0.201
B30	**0.741**	0.382	0.378	0.268	0.315	0.232	0.251	-0.133
B31	**0.704**	0.361	0.458	0.403	0.351	0.272	0.272	-0.148
B32	**0.782**	0.392	0.465	0.386	0.375	0.296	0.299	-0.185
C1	0.429	**0.706**	0.525	0.379	0.559	0.416	0.441	-0.261
C2	0.229	**0.606**	0.462	0.216	0.386	0.343	0.300	-0.249
C3	0.300	**0.693**	0.437	0.159	0.333	0.312	0.267	-0.264
C4	0.328	**0.753**	0.466	0.345	0.381	0.275	0.247	-0.167
C5	0.396	**0.708**	0.528	0.441	0.494	0.380	0.403	-0.301
C6	0.346	**0.820**	0.490	0.303	0.384	0.322	0.317	-0.247
C7	0.374	**0.842**	0.501	0.372	0.400	0.353	0.330	-0.241
C8	0.323	**0.763**	0.516	0.205	0.364	0.336	0.330	-0.281
D1	0.344	0.474	**0.781**	0.392	0.444	0.389	0.324	-0.304
D2	0.310	0.479	**0.698**	0.289	0.398	0.33	0.237	-0.29
D3	0.399	0.470	**0.784**	0.399	0.495	0.34	0.342	-0.231
D4	0.364	0.452	**0.772**	0.347	0.400	0.39	0.281	-0.314
D5	0.395	0.513	**0.732**	0.378	0.411	0.375	0.275	-0.337
D6	0.377	0.567	**0.775**	0.403	0.413	0.379	0.344	-0.332
D7	0.409	0.55	**0.670**	0.409	0.479	0.395	0.331	-0.272
D8	0.36	0.348	**0.661**	0.315	0.379	0.227	0.267	-0.208
D9	0.306	0.36	**0.635**	0.322	0.371	0.389	0.299	-0.282
D10	0.43	0.577	**0.656**	0.521	0.528	0.372	0.384	-0.275
D11	0.35	0.548	**0.768**	0.375	0.52	0.447	0.338	-0.355
D12	0.412	0.47	**0.807**	0.381	0.461	0.405	0.317	-0.327
E1	0.345	0.383	0.454	**0.748**	0.525	0.318	0.29	-0.174
E2	0.335	0.324	0.399	**0.810**	0.462	0.304	0.293	-0.205
E3	0.385	0.348	0.422	**0.810**	0.505	0.304	0.276	-0.142
E4	0.364	0.318	0.456	**0.815**	0.543	0.339	0.311	-0.162
E5	0.426	0.341	0.43	**0.814**	0.514	0.276	0.296	-0.254
E6	0.401	0.357	0.463	**0.858**	0.552	0.329	0.327	-0.189
E7	0.379	0.355	0.406	**0.853**	0.554	0.284	0.278	-0.222
E8	0.410	0.345	0.382	**0.807**	0.514	0.283	0.296	-0.161
E9	0.389	0.356	0.423	**0.846**	0.524	0.304	0.298	-0.182
F1	0.263	0.511	0.428	0.531	**0.750**	0.498	0.435	-0.228

F2	0.297	0.455	0.448	0.520	**0.756**	0.414	0.456	-0.313
F3	0.373	0.382	0.492	0.479	**0.802**	0.462	0.345	-0.195
F4	0.403	0.401	0.502	0.452	**0.801**	0.413	0.361	-0.266
F5	0.349	0.477	0.476	0.505	**0.771**	0.408	0.36	-0.194
F6	0.399	0.511	0.523	0.552	**0.838**	0.47	0.467	-0.277
F7	0.356	0.452	0.43	0.468	**0.739**	0.356	0.299	-0.196
F8	0.422	0.395	0.51	0.49	**0.795**	0.425	0.372	-0.247
H1	0.166	0.325	0.308	0.275	0.378	**0.711**	0.378	-0.293
H2	0.31	0.482	0.52	0.337	0.499	**0.881**	0.533	-0.335
H3	0.213	0.317	0.366	0.319	0.463	**0.824**	0.468	-0.358
H4	0.147	0.281	0.338	0.265	0.405	**0.740**	0.359	-0.270
H5	0.297	0.446	0.482	0.305	0.472	**0.864**	0.482	-0.319
I1	0.205	0.310	0.306	0.24	0.344	0.415	**0.750**	-0.273
I2	0.302	0.372	0.376	0.291	0.431	0.465	**0.831**	-0.376
I3	0.185	0.386	0.339	0.262	0.358	0.449	**0.755**	-0.313
I4	0.232	0.349	0.310	0.217	0.35	0.406	**0.761**	-0.285
I5	0.258	0.404	0.397	0.363	0.423	0.436	**0.818**	-0.36
I6	0.292	0.343	0.303	0.332	0.438	0.477	**0.828**	-0.285
J1	-0.194	-0.314	-0.324	-0.127	-0.267	-0.333	-0.349	**0.897**
J2	-0.195	-0.324	-0.395	-0.238	-0.284	-0.361	-0.400	**0.934**
J3	-0.193	-0.318	-0.403	-0.269	-0.301	-0.388	-0.366	**0.949**

Source: Survey Data

Although Fornell and Larcker and cross-loadings provide evidence for discriminant validity, these measures are argued to be less capable of detecting DV in some circumstances. As a result, the Heterotrait-Monotrait Ratio (HTMT) was introduced to better assess DV (Henseler, Ringle, & Sarstedt, 2015). According to Henseler et al. (2015), DV is confirmed when HTMT values are less than 0.90 in the reflective measurement model. However, an HTMT that is equal to one suggests a lack of DV. Table 4.12 provides the HTMT values for all constructs. As all HTMT values are below 0.74, it is concluded that DV is well supported.

Table 4. 12 The Heterotrait-Monotrait Ratio (HTMT)

	1	2	3	4	5	6	7
1 Employee Intention to Leave							
2 Employment Motivation	0.443						
3 Employees' Perceptions of HPWS	0.214	0.324					
4 Inclusive Leadership	0.247	0.397	0.487				
5 Job-Based Psychological Ownership	0.379	0.505	0.489	0.452			
6 Employee Job Satisfaction	0.435	0.628	0.293	0.413	0.516		
7 On-the-Job Embeddedness	0.438	0.472	0.526	0.560	0.733	0.553	
8 Professional Identity	0.335	0.550	0.484	0.694	0.627	0.615	0.662

Source: Survey Data

In conclusion, the reliability (internal consistency and item reliability) and validity (convergent and discriminant validity) for the reflective measurement model of this study has been satisfactorily established. This allowed the researcher to run the structural model.

4.5.2 Evaluation of Structural Model

After confirming the measurement model in terms of appropriateness and quality of construct measures, the structural model evaluation was undertaken. This section explains the structural model evaluation, including: 1. assessing collinearity issues, 2. examining the path analysis (for any association between the research constructs), and 3. further investigating the predictive capabilities in terms of the coefficient of determination (R^2), the predictive relevance (Q^2) and SRMR (Hair et al., 2017). The collinearity assessment needed to be performed first in order to find out whether the predictors in the model are free of any multi-collinearity issues.

For path analysis, three statistical analysis methods were used: 1. hierarchical regression analyses was used to calculate the standardised regression path coefficient (β); 2. bootstrapped confidence interval using SPSS was used to investigate the hypothesised direct paths between

research constructs; and 3. SPSS PROCESS macro was utilised to test the hypotheses that consist of indirect associations among the study variables (Hayes, 2013).

4.5.2.1 Assessing Collinearity Issues

According to Hair et al (2011), multi-collinearity problems occur when each construct's variance inflation factor (VIF) value exceeds 5. However, all VIF values of this study's constructs are below the threshold value of 5, as shown in Table 4.13. For this table, employees' perceptions of HPWS, on-the-job embeddedness and job-based psychological ownership were the predictors of three employee outcomes: employee job satisfaction, employee motivation and employee intention to leave. Employee perceptions' of HPWS were the predictors of both on-the-job embeddedness and job-based psychological ownership. Furthermore, the moderating construct of professional identity was the predictor of employee job satisfaction, whereas inclusive leadership was a predictor of job-based psychological ownership. It is concluded that all constructs are free from multi-collinearity problems, as their VIF values are below 5.

Table 4. 13 Multi-Collinearity Analysis

	1	2	3	4	5	6	7	8
1. Employee Intention to Leave								
2. Employee Job Satisfaction								
3. Employees' Perceptions of HPWS	1.412	1.458		1.412		1.371	1.000	
4. Employment Motivation								
5. Inclusive Leadership						1.288		
6. Job-Based Psychological Ownership	1.889	2.042		1.889				
7. On-The-Job Embeddedness	1.987	2.387		1.987				
8. Professional Identity		1.840						

Source: Survey Data

4.5.2.2 Examining Path Analysis and Testing Hypothesis

The hypothesised associations can be tested using the significance of path coefficients and their respective t-values. Past empirical research suggested that, in order to support each hypothesised relationship in the research model, the path coefficient score needs to be more than 0.10 (Hair et al., 2011).

Hierarchical regression analysis using SPSS was employed to generate the standardised regression path coefficients (β). Furthermore, a bootstrapping procedure was performed with a 5000 sample to obtain the confidence interval (CI) in order to examine whether or not the proposed hypotheses were supported. Moreover, The Lower Limit Confidence Interval (LLCI) and Upper Limit Confidence (ULCI) were used to determine whether the path coefficient was significant. According to Hair et al. (2017), in order to accept the hypothesis, the CI range should not include zero. On the other hand, if a zero value falls within the range, the null hypothesis must be accepted. Each direct path hypothesis was tested with all control variables included in the model, as discussed below.

H1 (a), H1 (b) and H1 (c) Analyses

Table 4.14 and Figure 4. 1 below show the hypotheses testing results for H1 (a), H1 (b) and H1 (c), including all control variables. These hypotheses predicted how employees' perceptions of HPWS are related to each employee outcome: employee job satisfaction, employee motivation and employee intention to leave. As per the analyses, all three hypotheses are supported. The first hypothesis, H1 (a), shows a positive and significant relationship between employees' perceptions of HPWS and employee job satisfaction (β: 0.239, t= 4.417, 95 % CI 0.124 to 0.322). The second hypothesis, H1 (b), is also supported, and suggests that employees'

perceptions of HPWS are positively related to employee motivation (β: 0.271, t= 4.930, 95 % CI 0.152 to 0.354). Further, it demonstrates that there is a significant negative association between employees' perceptions of HPWS and employee intention to leave, and thus H1 (c) is also supported (β: -0.174, t= -3.117, 95 % CI -0.500 to -0.113).

These results demonstrate that employees' perceptions of HPWS could promote favourable employee outcomes, such as enhancing employee job satisfaction and motivation while reducing employee intention to leave the workplace. Employees who perceive higher levels of HPWS are more likely to be satisfied and motivated in the workplace (Kloutsiniotis & Mihail, 2017; Kooij et al., 2010; Wu et al., 2011). Moreover, higher levels of employees' perceptions of HPWS lead to reduced employee intention to leave the organisation (Kuean et al., 2010; Karatepe, 2013).

Table 4. 14 Path Analyses H1 (a), H1 (b) and H1 (c)

	Hypothesised Paths	Standardised Path Coefficients (β)	95% Confidence Interval	T-value	P-value
H1 (a)	Employees' Perceptions of HPWS ⟶ Employee Job Satisfaction	0.239	(0.124, 0.322)	4.417	0.000
H1 (b)	Employees' Perceptions of HPWS ⟶ Employee Motivation	0.271	(0.152, 0.354)	4.930	0.000
H1 (c)	Employees' Perceptions of HPWS ⟶ Employee Intention to Leave	-0.174	(-0.500, -0.113)	-3.117	0.002
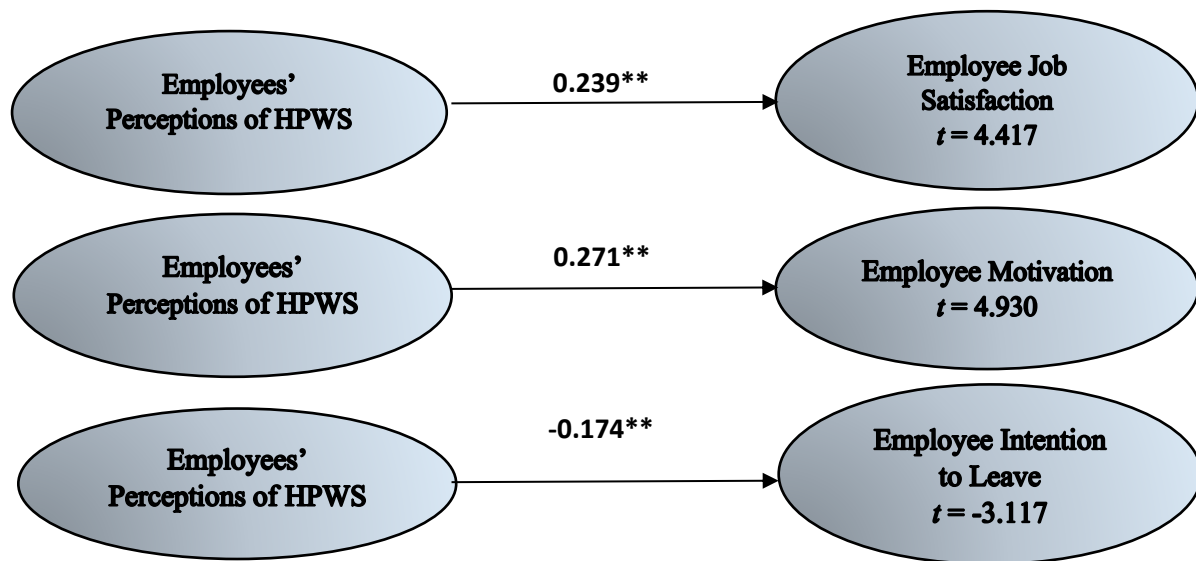
Figure 4. 1 H1 (a), H1 (b) and H1 (c) Hypotheses Results

H2 and H3 Analyses

Hypotheses H2 and H3 are also supported, as presented in Table 4.15 and Figure 4.2. Hypothesis 2 predicted a positive and significant association between employees' perceptions of HPWS and on-the-job embeddedness (β: 0. 478, t= 9.863, 95 % CI 0.355 to 0.533). H3 is accepted as employees' perceptions of HPWS are positively related to job-based psychological ownership (β: 0. 420, t= 8.139, 95 % CI 0.294 to 0.482).

These results indicate that when employees perceive higher levels of HPWS in organisations, they are more likely to embed into their jobs and feel higher levels of psychological ownership towards their jobs. HPWS leads to employees achieving higher levels of job embeddedness by enhancing their ability and motivation, and providing opportunities for them in the workplace (Holtom et al., 2006; Mitchell et al., 2001). In addition, HPWS factors persuade employees to change their perceptions of sacrifice (Bambacas & Kulik, 2013; Holtom et al., 2006). On the other hand, employees are more likely to sense a higher level of ownership for their jobs when

they have received motivation and opportunities to exercise control and autonomy, and participate in job-related decisions (Han et al., 2010; O'Driscoll et al., 2006).

Table 4. 15 H2 and H3 Analyses

	Hypothesised Paths	Standardised Path Coefficients (β)	95% Confidence Interval	T-value	P-value
H2	Employees' Perceptions of HPWS ⟶ On-the-Job Embeddedness	0.478	(0.355, 0.533)	9.863	0.000
H3	Employees' Perceptions of HPWS ⟶ Job-Based Psychological Ownership	0.420	(0.294,0.482)	8.139	0.000
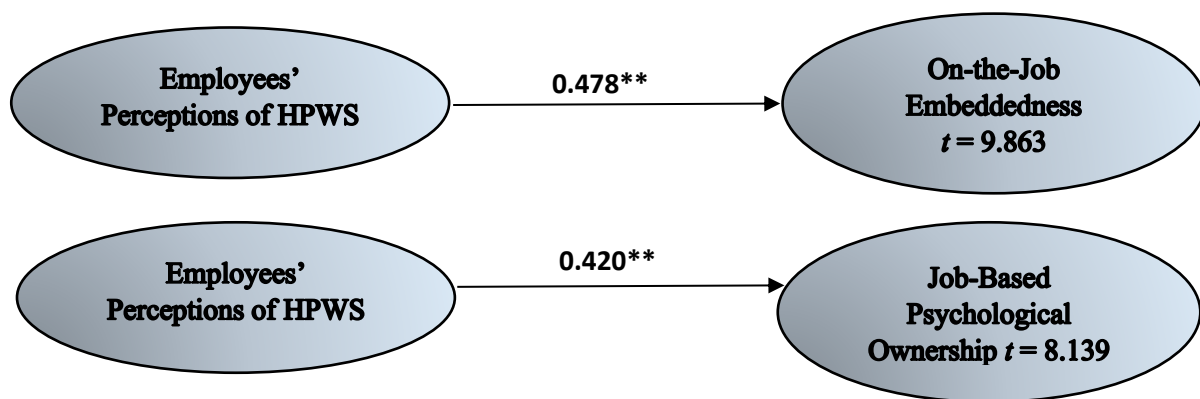
Figure 4. 2 H2 and H3 Hypotheses Results

H4, H5 and H6 Analyses

Hypotheses H4 to H6 focused on on-the-job embeddedness, and positively impact three employee outcomes in the model. All three hypotheses are supported (See Table 4. 16 and Figure 4.3). Hypothesis 4 predicted that there would be a positive and significant relationship found between on-the-job embeddedness and employee job satisfaction (β: 0. 453, t= 8.873, 95 % CI 0.354 to 0.555). A positive link is shown between on-the-job embeddedness and employee motivation (β: 0. 414, t= 7.733, 95 % CI 0.310 to 0.522). Hypothesis 6 is also

supported with a negative and significant path co-efficient (β: -0.352, t= -6.479, 95 %, CI -0.872, -0.466) between on-the-job embeddedness and employee intention to leave.

These results indicate that employees with higher levels of job embeddedness towards their jobs are more likely to experience positive employee outcomes, such as enhancing employee job satisfaction and motivation, while reducing their intention to leave the organisations. In addition, employees who feel positively about their jobs are more likely to be satisfied and stay with their current organisation (Holtom et al., 2006; Mitchell et al., 2001).

Table 4. 16 H4, H5 and H6 Analyses

Hypothesised Paths		Standardised Path Coefficients (β)	95% Confidence Interval	T-value	P-value
H4	On-the-Job Embeddedness ⟶ Employee Job Satisfaction	0.453	(0.354, 0.555)	8.873	0.000
H5	On-the-Job Embeddedness ⟶ Employee Motivation	0.414	(0.310, 0.522)	7.733	0.000
H6	On-the-Job Embeddedness ⟶ Employee Intention to Leave	-0.352	(-0.872, -0.466)	-6.479	0.000
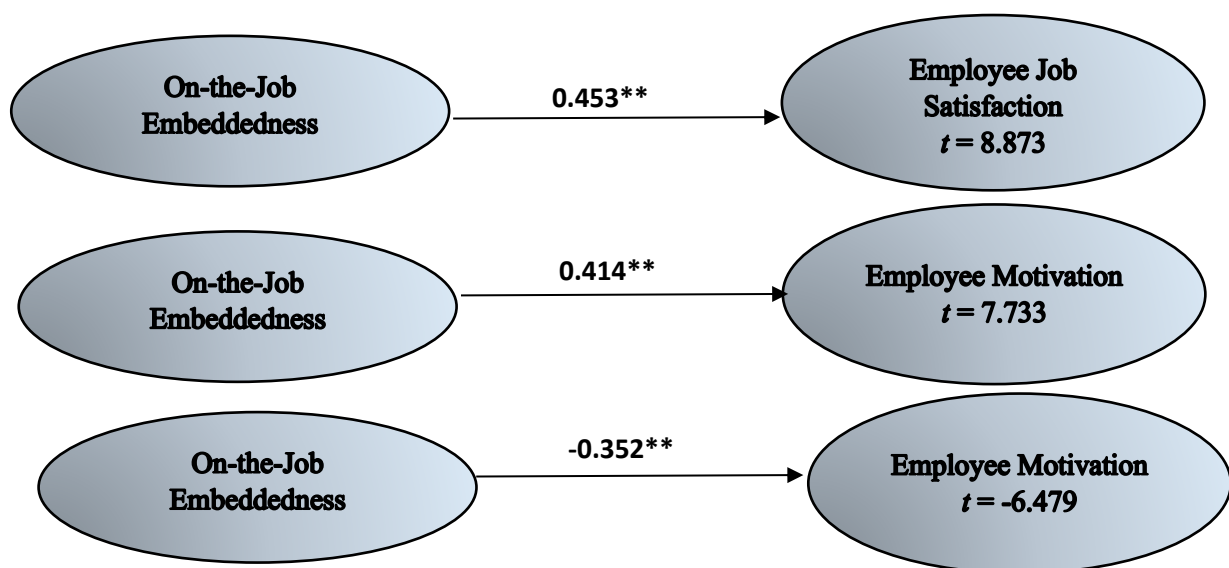
Figure 4. 3 H4, H5 and H6 Hypotheses Result

H7, H8 and H9 Analyses

The hypotheses H7 to H9 represent the relationships between job-based psychological ownership and threefold employee outcomes. As shown in Table 4.17 and Figure 4.4, H7 to H9 hypotheses are accepted. Hypothesis H7 is supported, as there is a positive and significant association found between job-based psychological ownership and employee job satisfaction (β: 0. 443, t= 8.877, 95 % CI 0.347 to 0.545). A significant positive link is also found between job-based psychological ownership and employee motivation, reflecting H8 (β: 0. 478, t= 9.511, 95 % CI 0.353 to 0.553). Moreover, the negative and significant path coefficient found between job-based psychological ownership and employee intention to leave leads support to H9 (β: -0.323, t= -6.042, 95 % CI -0.818 to -0.416).

These results demonstrate that employees who sense a higher level of psychological ownership for their jobs are more likely to experience satisfaction their jobs, discover motivation in the workplace and are less likely to leave their workplaces. Employees who possess more psychological ownership towards their jobs are more likely to experience satisfaction and commit to their jobs and be motivated, and consequently are less likely to leave their jobs (Schulz et al., 2014).

Table 4. 17 H7, H8 and H9 Analyses

	Hypothesised Paths	Standardised Path Coefficients (β)	95% Confidence Interval	T-value	P-value
H7	Job-Based Psychological Ownership ⟶ Employee Job Satisfaction	0.443	(0.347, 0.545)	8.877	0.000
H8	Job-Based Psychological Ownership ⟶ Employee Motivation	0.478	(0.353,0.553)	9.511	0.000

H9	Job-Based Psychological Ownership $\longrightarrow$ Employee Intention to Leave	-0.323	(-0.818,-0.416)	-6.042	0.000
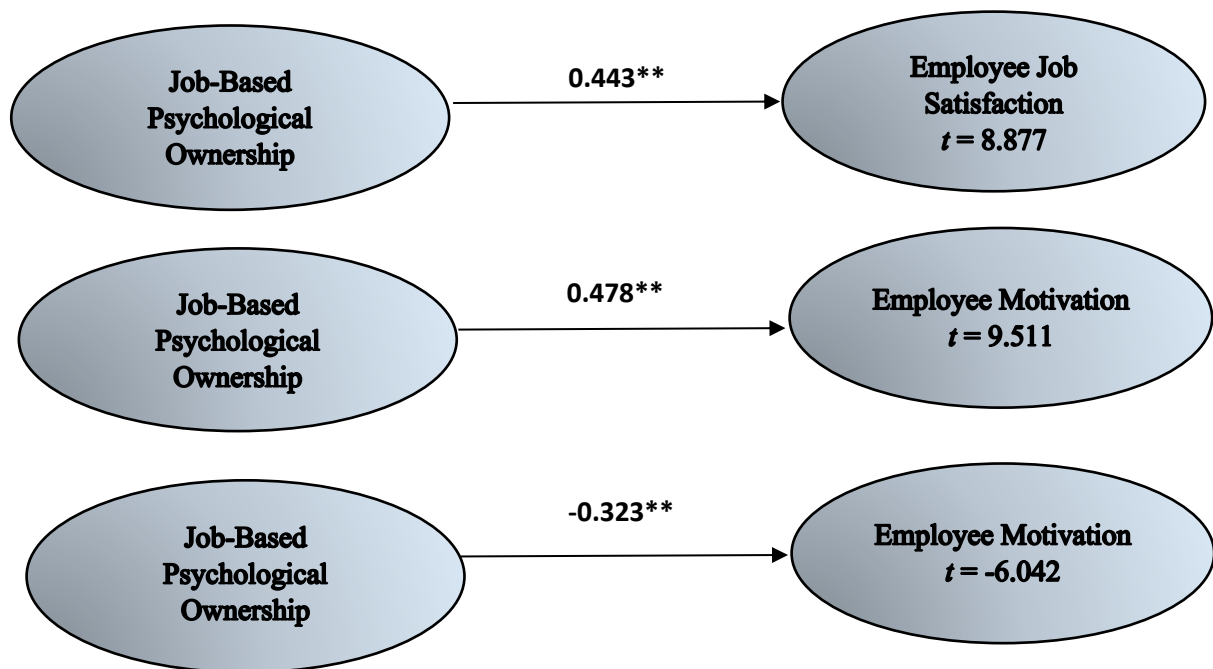
Figure 4. 4 H7, H8 and H9 Hypotheses Results

Mediation Analyses

Following direct hypotheses testing, the hypotheses for mediating relationships (hypotheses 10 to 15) were examined. In examining mediating associations, the mediation approach proposed by Baron and Kenny (1986) is widely used in social research. However, this approach has been identified as having methodological and conceptual issues by Zhao, Lynch, and Chen (2010). Furthermore, Zhao et al. (2010) provide some mediation analysis guidelines. According to them, the following mediation relationships can be found: 1. complementary mediation, 2. competitive mediation, and 3. indirect-only mediation. Complementary mediation (partial mediation) occurs when both the indirect and direct mediations are significant and point in the same direction; whereas in competitive mediation (suppressor effect), although direct and

indirect effects are significant, they point in the opposite directions. In the case of indirect-only mediation (full mediation)**,** only the indirect effect is significant, but the direct effect is insignificant (Baron & Kenny, 1986; Hair et al., 2021; Zhao et al., 2010). Figure 4.5 illustrates how the mediation effects need to be judged.
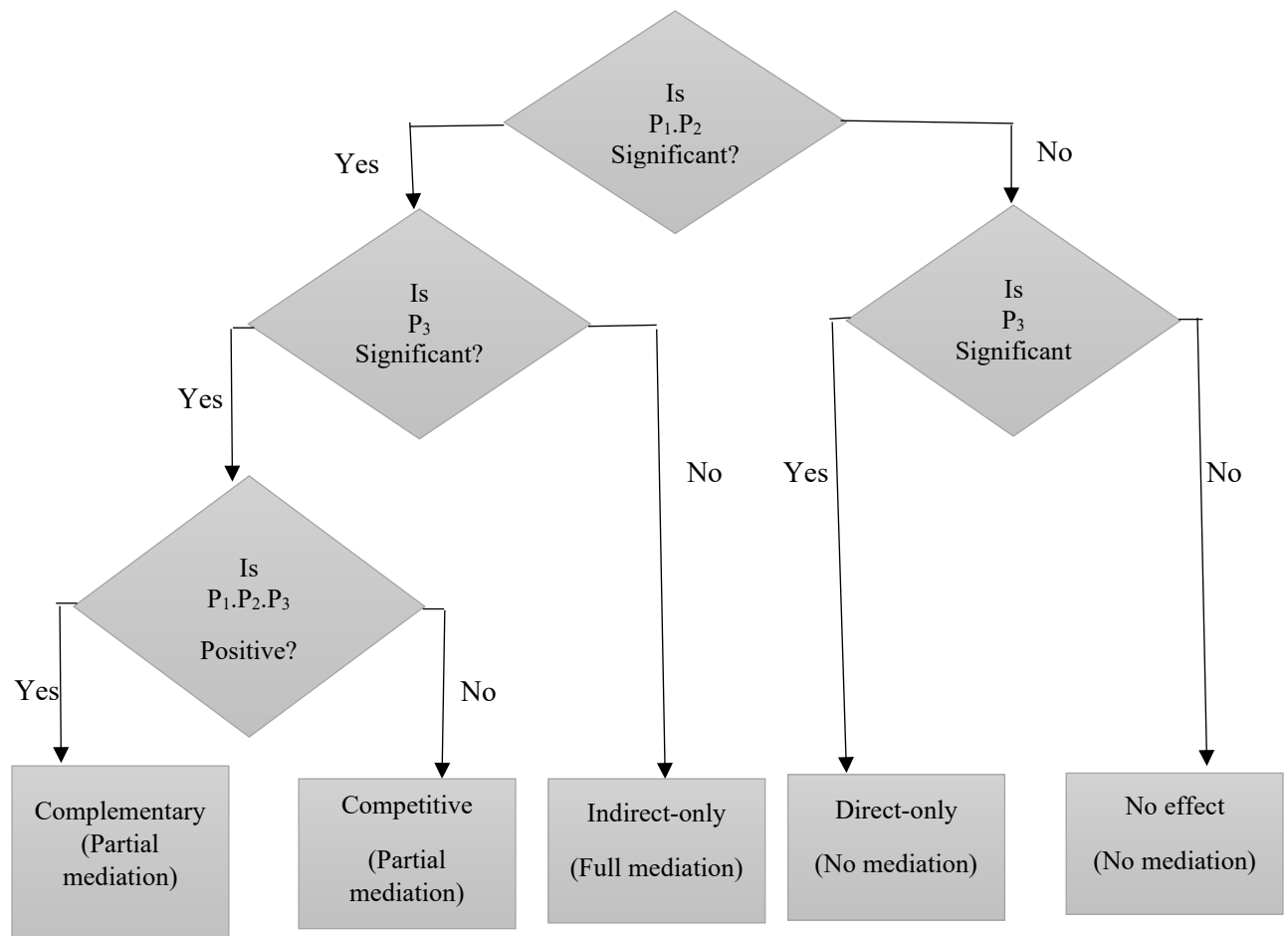
Figure 4. 5 Mediation Analysis Flowchart

Source: Adapted from Hair et al., 2021; Zhao et al., 2010

Based on the guidelines provided by Hair et al. (2021) and Zhao et al. (2010), the mediation relationships for this study were examined using Model 4 of SPSS 27.0 PROCESS macro (Hayes, 2013). The researcher obtained 95% confidence intervals (CI) using SPPS 27.0 PROCESS macros with a 5000 sample, which were used to create statistical significance. Hypotheses 10 to 12 predicted that on-the-job embeddedness would mediate the path between

employees' perceptions of HPWS and three employee outcomes (i.e. employee job satisfaction, employee motivation and employee intention to leave). Hypothesis 10 is supported, suggesting that on-the-job embeddedness plays a significant mediating role between employees' perceptions of HPWS and employee job satisfaction (Effect= 0.204, 95%, CI 0.124 to 0.304), as illustrated in Table 4.18. Hypothesis 11 is also accepted, as employees' perceptions of HPWS exerted a significant positive effect on employee job satisfaction through increased on-the-job embeddedness of employees, as shown in Table 4.19 (Effect=0.163, 95%, CI 0.082 to 0.259). Moreover, hypothesis 12 confirms that on-the-job embeddedness plays a significant mediating role between employees' perceptions of HPWS and employee job satisfaction (Effect= -0.310, 95%, CI 0.082 to 0.259). The total direct and indirect effects of hypothesis 13 are presented in Table 4.20.

Table 4. 18 Hypothesis 10 Total, Direct and Indirect Effects

Total effect of employees' perceptions of HPWS on Employee Job Satisfaction					
Effect	SE	t	p	LLCI	ULCI
0.226	0.050	4.557	0.000	0.127	0.324
Direct effect of employees' perceptions of HPWS on Employee Job Satisfaction					
Effect	SE	t	p	LLCI	ULCI
0.022	0.051	0.432	0.666	-0.079	0.123
Indirect effect of employees' perceptions of HPWS on Employee Job Satisfaction					
		Effect	Boot SE	Boot LLCI	Boot ULCI
On-the-Job Embeddedness		0.204	0.046	0.124	0.304

Source: Survey Data

Table 4. 19 Hypothesis 11 Total, Direct and Indirect Effects

Total effect of employees' perceptions of HPWS on Employee Motivation					
Effect	SE	t	p	LLCI	ULCI
0.252	0.049	5.136	0.000	0.156	0.350
Direct effect of employees' perceptions of HPWS on Employee Motivation					
Effect	SE	t	p	LLCI	ULCI
0.091	0.053	1.714	0.087	-0.013	0.194
Indirect effect of employees' perceptions of HPWS on Employee Motivation					
		Effect	Boot SE	Boot LLCI	Boot ULCI
On-the-Job Embeddedness		0.163	0.046	0.082	0.259

Source: Survey Data

Table 4. 20 Hypothesis 12 Total, Direct and Indirect Effects

Total effect of employees' perceptions of HPWS on Employee Intention to Leave					
Effect	SE	t	p	LLCI	ULCI
-0.337	0.095	-3.544	0.006	-0.525	-0.150
Direct effect of employees' perceptions of HPWS on Employee Intention to Leave					
Effect	SE	t	p	LLCI	ULCI
-0.027	0.102	-0.266	0.791	-0.228	0.174
Indirect effect of employees' perceptions of HPWS on Employee Intention to Leave					
		Effect	Boot SE	Boot LLCI	Boot ULCI
On-the-Job Embeddedness		-0.310	0.067	-0.451	-0.182

Source: Survey Data

Based on the recommendations of Hair et al. (2021) and Zhao et al. (2010), on-the-job embeddedness fully mediates the relationship between employees' perceptions of HPWS and each employee outcome in this study. Furthermore, it is suggested that the results of mediator analysis for on-the-job embeddedness fully align with the hypothesised conceptual framework (Hair et al., 2021). Thus, the testing results indicate that higher levels of employees'

perceptions of HPWS are capable of enhancing job embeddedness towards employee jobs, which, in turn, exerts positive effects on employee outcomes (such as enhancing job satisfaction and employee motivation, while reducing employee intention to leave organisations). The best human resource management practices first lead to enhanced job embeddedness (Bergiel et al., 2009; Tian et al., 2016), and subsequently lead to enhanced favourable employee outcomes in the workplace Karatepe, 2013; Kloutsiniotis & Mihail, 2017).

Hypotheses 13 to 15 examined the mediating role of job-based psychological ownership between employees' perceptions of HPWS and employee outcomes. As presented in Table 4.21, hypothesis 13 is supported, suggesting that job-based psychological ownership plays a mediating role between employees' perceptions of HPWS and employee job satisfaction (Effect=0.181, 95%, CI 0.105 to 0.274). Hypothesis 14 is also supported, and confirms the mediating role of job-based psychological ownership between employees' perceptions of HPWS and employee motivation ((Effect=0.175, 95%, CI 0.103 to 0.261). The hypothesis 14 results are presented in Table 4. 22. Furthermore, as illustrated in Table 4.23, hypothesis 15 is supported, as employees' perceptions of HPWS have a negative effect on employees' intention to leave through increased job-based psychological ownership (Effect= -0.236, 95%, CI -0.355 to -0.127).

Table 4. 21 Hypothesis 13 Total, Direct and Indirect Effects

Total effect of employees' perceptions of HPWS on Employee Job Satisfaction					
Effect	SE	t	p	LLCI	ULCI
0.251	0.051	4.968	0.000	0.152	0.351
Direct effect of employees' perceptions of HPWS on Employee Job Satisfaction					
Effect	SE	t	p	LLCI	ULCI
0.070	0.052	1.368	0.172	-0.031	0.172

Indirect effect of employees' perceptions of HPWS on Employee Job Satisfaction				
	Effect	Boot SE	Boot LLCI	Boot ULCI
Job-Based Psychological Ownership	0.181	0.044	0.105	0.274

Table 4. 22 Hypothesis 14 Total, Direct and Indirect Effects

Total effect of employees' perceptions of HPWS on Employee Motivation					
Effect	SE	t	p	LLCI	ULCI
0.253	0.049	5.136	0.000	0.156	0.350
Direct effect of employees' perceptions of HPWS on Employee Motivation					
Effect	SE	t	p	LLCI	ULCI
0.079	0.049	1.601	0.111	-0.018	0.175
Indirect effect of employees' perceptions of HPWS on Employee Motivation					
		Effect	Boot SE	Boot LLCI	Boot ULCI
Job-Based Psychological Ownership		0.175	0.041	0.103	0.261

Table 4. 23 Hypothesis 15 Total, Direct and Indirect Effects

Total effect of employees' perceptions of HPWS on Employee Intention to Leave					
Effect	SE	t	p	LLCI	ULCI
-0.338	0.095	-3.544	0.001	-0.525	-0.150
Direct effect of employees' perceptions of HPWS on Employee Intention to Leave					
Effect	SE	t	p	LLCI	ULCI
-0.102	0.100	-1.018	0.309	-0.299	0.095
Indirect effect of employees' perceptions of HPWS on Employee Intention to Leave					
		Effect	Boot SE	Boot LLCI	Boot ULCI
Job-Based Psychological Ownership		-0.236	0.059	-0.355	-0.127

Based on the above hypotheses results (H13 to H15), job-based psychological ownership fully mediates the association between employees' perceptions of HPWS and each employee outcome (employee job satisfaction, employee motivation and employee intention to leave). Thus, the results of the mediator analysis for job-based psychological ownership fully align with the hypothesized conceptual framework (Hair et al., 2021). These results indicate that higher levels of employees' perceptions of HPWS are more likely to enhance employees'

psychological ownership towards their jobs, which in turn enhance employee outcomes, such as employee job satisfaction and motivation, and reduce employee intention to leave organisations. Thus, job-based psychological ownership plays a key mediating role between the HPWS and employee outcomes.

Moderation and Mediated-Moderated Analyses

SPSS PROCESS macro was employed to test hypotheses 16 to 18, representing the moderating and mediated-moderated effect (Hayes, 2013). To support a moderation effect, there needs to be a significant path between the interaction term and the dependent construct (Hair et al., 2016). PROCESS macro model 1 was used to test moderated effect based on an assessment of the bootstrapped confidence interval (CI) of 5000 samples. The result does not provide support for hypothesis 16, as the interaction effect is not statistically significant and 95% of CI contain zero (β = -.0750, t= -1.881, p= 0.060, 95%, CI -.153 to 0.003). Thus, no support is found for the moderating effect of inclusive leadership on the relationship between employees' perceptions of HPWS and job-based psychological ownership. Therefore, it is concluded that inclusive leadership does not always induce favourable employee outcomes in the workplace (Zhu, Xu, & Zhang, 2020).

Hypothesis 17 also involved examining the moderating effect between on-the-job embeddedness and employee job satisfaction. Macro Process Model 1 was used to examine this hypothesis. Since the interaction effect is statistically significant and the 95% CI value does not contain the zero value, hypothesis 17 is supported (β = -.0920, t= -2.6014, p= .0097, 95%, CI -.1615 to -.0224). Hence, the results show that professional identity negatively moderates the relationship between on-the-job embeddedness and employee job satisfaction. When employees possess higher levels of professional identity, they are more likely to search

for other employment opportunities, and subsequently reduce their engagement and commitment in their current jobs (Raeder & Grote, 2007).

Mediated-Moderated Analyses

Hypothesis 18 involved a mediated moderated relationship. The SPSS Macro Process Model 14 was employed to test this hypothesis with the bootstrapped confidence interval (CI) of 5000 samples. The results support this mediated moderated association 16, because the interaction effect is statistically significant and the 95% CI value does not contain any zero values (β = -.0914, t= -2.5786, p= .0104, 95%, CI -.1611 to -.0216). Thus, it is concluded that professional identity negatively moderates the mediating effect of on-the-job embeddedness that exists in the relationship between employees' perceptions of HPWS and employee job satisfaction. In other words, when high employee professional identity exists, employees feel lower levels of on-the-job embeddedness, and HPWS exerts a lesser impact on employee job satisfaction.

Table 4. 24 A summary of hypotheses

Hypotheses	Direct or Indirect	Supported or Not
Hypothesis 1 (a): Higher levels of employees' perceptions of HPWS are positively related to employee job satisfaction.	Direct	Supported
Hypothesis 1 (b): Higher levels of employees' perceptions of HPWS are positively related to employee motivation.	Direct	Supported
Hypothesis 1 (c): Higher levels of employees' perceptions of HPWS are positively related to employee intention to leave.	Direct	Supported
Hypothesis 2: Higher levels of employees' perceptions of HPWS are positively related to on-the-job embeddedness.	Direct	Supported

Hypothesis 3: Higher levels of employees' perceptions of HPWS are positively related to job-based psychological ownership.	Direct	Supported
Hypothesis 4: Higher levels of on-the-job embeddedness are positively related to employee job satisfaction.	Direct	Supported
Hypothesis 5: Higher levels of on-the-job embeddedness are positively related to employee motivation.	Direct	Supported
Hypothesis 6: Higher levels of on-the-job embeddedness are positively related to employee intention to leave.	Direct	Supported
Hypothesis 7: Higher levels of job-based psychological ownership are positively related to employee job satisfaction.	Direct	Supported
Hypothesis 8: Higher levels of job-based psychological ownership are positively related to employee job satisfaction.	Direct	Supported
Hypothesis 9: Higher levels of job-based psychological ownership are positively related to employee job satisfaction.	Direct	Supported
Hypothesis 10: On-the-job embeddedness mediates the relationship between employees' perceptions of HPWS and employee job satisfaction.	Indirect (Mediated)	Supported
Hypothesis 11: On-the-job embeddedness mediates the relationship between employees' perceptions of HPWS and employee motivation.	Indirect (Mediated)	Supported
Hypothesis 12: On-the-job embeddedness mediates the relationship between employees' perceptions of HPWS and employee intention to leave.	Indirect (Mediated)	Supported
Hypothesis 13: Job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and employee job satisfaction.	Indirect (Mediated)	Supported

Hypothesis 14: Job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and employee motivation.	Indirect (Mediated)	Supported
Hypothesis 15: Job-based psychological ownership mediates the relationship between employees' perceptions of HPWS and employee intention to leave.	Indirect (Mediated)	Supported
Hypothesis 16: Inclusive Leadership moderates the relationship between HPWS and job-based psychological ownership.	Indirect (Moderated)	Not Supported
Hypothesis 17: Professional identity negatively moderates the relationship between on-the-job embeddedness and employee job satisfaction.	Indirect (Moderated)	Supported
Hypothesis 18: Professional identity negatively moderates the mediating effect of on-the-job embeddedness that has on the relationship between employees' perceptions of HPWS and employee job satisfaction.	Indirect (Mediated Moderated)	Supported

4.5.2.3 Other Structural Model Measures

In addition to the path analysis discussed above, other important metrics were also obtained using Smart-PLS to investigate the predictive capabilities of the model. SmartPLS was used to obtain these metrics, including the coefficient of determination (R^2), the size of the predictor effect (f^2), the predictive relevance (Q^2) and SRMR (Hair et al., 2017).

Coefficient of Determination (R^2)

The coefficient of determination (R^2) is an important metric with which to assess the predictive power of the model (Hair et al., 2017). The R^2 value explains the combined effects of the exogenous latent constructs on the endogenous latent construct, and the R^2 values generally range from 0 to 1. Although there is no cut-off value recommended, higher levels of R^2 values represent higher levels of the predictive accuracy of the structural model (Hair et al., 2017). The R^2 value is 0.20, which is suggested as reflecting high predictive accuracy in consumer behaviour studies (Hair et al., 2011; Hair et al., 2017). Table 4.25 presents the R^2 values of all five endogenous variables, and the results confirm a satisfactory level of predictive accuracy for the assessed model.

Table 4. 25 R2 Values for Endogenous Constructs

Endogenous Constructs	R^2
Employee Job Satisfaction	0.378
Employment Motivation	0.241
Employee Intention to Leave	0.174
On-The-Job Embeddedness	0.261
Job-Based Psychological Ownership	0.284

Source: Survey Data

Predictive Relevance (Q^2)

The Stone-Geisser's (Q^2) is another indicator for examining the predictive accuracy of the structural model. The Q^2 value is generally obtained from the blindfolding procedure using Smart-PLS. When Q^2 values are greater than zero, this indicates that exogenous constructs have predictive relevance for the endogenous construct (Hair et al., 2017). Table 4.26 depicts Q^2 values of 0.142 (employee intention to leave), 0.229 (employee job satisfaction), 0.145 (employment motivation), 0.134 (job-based psychological ownership) and 0.133 (on-the-job

embeddedness) which are above the cut-off value of zero, reflecting satisfactory levels of predictive relevance for the endogenous variables under consideration (Hair et al., 2017).

Table 4. 26 The Stone-Geisser's (Q2) Values

	SSO	SSE	Q² (=1-SSE/SSO)
Employee Intention to Leave	945	811.21	0.142
Employee Job Satisfaction	1575	1214.108	0.229
Employment Motivation	1890	1616.776	0.145
Job-Based Psychological Ownership	2520	2182.363	0.134
On-The-Job Embeddedness	3780	3276.241	0.133

Source: Survey Data

The effect size (*f2*)

The effect size (*f2*) explains how the independent variable contributes to the dependent variable's R2. The threshold values of f2 could be 0.005,0.01 and 0.025, which shows small, medium and strong effect sizes, respectively (Kenny, 2016). The f2 values of the results confirm that all the independent constructs could affect dependent constructs.

Goodness of fit

In addition to the assessment of R^2 and Q^2, SRMR was used to evaluate the model fit. Although, there is no defined threshold for determining SRMR in partial least squares analysis, the SRMR value of 0 to 0.08 indicates the model's goodness of fit (Henseler et al., 2016; Hair et al., 2017). The SRMR value obtained from Smart PLS is 0.07, indicating that the model achieves good fit.

4.6 Chapter Summary and Conclusion

This chapter firstly reported the preliminary data analysis that was conducted, using Excel and SPSS 27.0, to ensure the data were of acceptable quality and free of error before conducting the SEM analysis. In the preliminary analysis phase, any missing values and suspicious response patterns in any questionnaires were identified, and the decision was made to remove them, as they impacted the quality of the data analysis. Moreover, the normal distribution of data was confirmed for this study. The following section presents the distribution of the demographic profile of the research participants. The descriptions and correlations among the constructs are also reported.

Following a preliminary analysis, SEM analysis was conducted in two phases. First, the measurement model assessment was undertaken to ensure the quality of construct measures, in terms of reliability and validity. As this study adopted a reflective measurement model, the assessments of internal consistency reliability, item reliability, convergent validity and discriminant validity were performed. These reliability and validity tests were evaluated using Smart-PLS, and were confirmed to have achieved the satisfactory levels required to further run the measurement models.

The structural model was assessed using three statistical analysis methods: SPSS, Smart-PLS and SPSS Macro Process. As an initial step in the structural model, collinearity issues were assessed and the constructs were found to be free from multi-collinearity problems. Next, a hierarchical regression analysis was employed to examine the direct paths of the model using the standardised regression path coefficient (β) and confidence interval (CI). All direct hypotheses are supported by this study. Furthermore, the SPSS Macro Process was utilised to investigate the mediated, moderated, mediated-moderated and moderated-mediated

hypotheses. The indirect hypotheses reveal that both on-the-job embeddedness and job-based psychological ownership play a fully mediating role between employees' perceptions of HPWS and each employee outcome (employee job satisfaction, employee motivation and employee intention to leave) in the model.

The moderator of inclusive leadership is not found to be an effective moderator between employees' perceptions of HPWS and job-based psychological ownership. Interestingly, the findings show that the moderating effect of professional identity negatively impacts the mediating effect that on-the-job embeddedness has on the relationship between employees' perceptions of HPWS and employee job satisfaction. Hence, this study offers empirical evidence for supporting all hypotheses, except the moderating role of inclusive leadership between employees' perceptions of HPWS and job-based psychological ownership.

In addition to the model assessment, this study undertook other structural model measures such as R2, Q2 and SRMR. As a result, the model of this study is confirmed with satisfactory levels of predictive abilities (R2) and predictive relevance (Q2). Furthermore, the quality of fit (SRMR) is also achieved.

The discussion, conclusion, limitations of this study and further future research avenues are presented in the next chapter.

Chapter 5

Discussion, Conclusion and Future Research Directions

5.1 Introduction

This study examined how employees' perceptions of HPWS impact the following employee outcomes: job satisfaction, motivation and intention to leave. The study findings have revealed that employees' perceptions of HPWS play an indispensable role in enhancing employee job satisfaction, employee motivation and diminishing employee turnover intention.

This final chapter of the thesis first presents this study's research findings, along with its research questions and developed hypotheses. The chapter then discusses the implications of this study in terms of both theoretical, and practical and managerial contributions. Next, this chapter presents the study limitation and suggests some pathways for future researchers. The chapter concludes with some brief remarks on this study.

5.2 Research Findings

This section recaps the study's eight research questions and presents brief key research findings for each hypothesis. This study investigated the relationship between employees' perceptions of HPWS and three employee outcomes (employee job satisfaction, employee motivation and employee intention to leave) via the proposed mediating and moderating mechanisms. In addition, the study introduced two mediators, on-the-job embeddedness and job-based psychological ownership, and two moderators, inclusive leadership and professional identity. The proposed model of this study is presented in Figure 5.1.
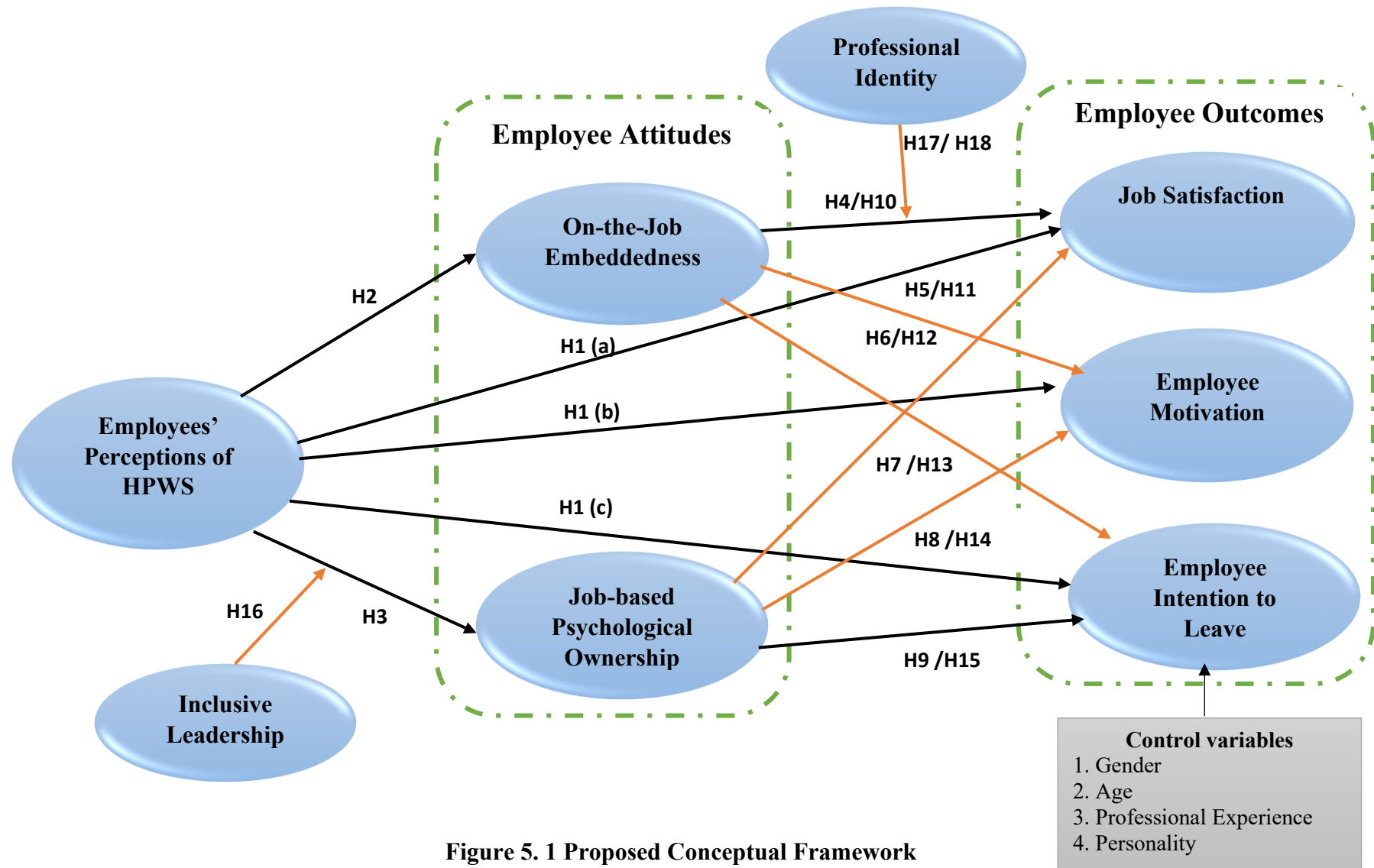
Figure 5. 1 Proposed Conceptual Framework

Research Question 1

The first research question examined how employees' perceptions of HPWS influence employee outcomes of job satisfaction, motivation and intention to leave. Hypotheses 1 (a), 1 (b) and 1 (c) respond to the first research question. As hypothesised in Chapter 2, the data reveals that employees' perceptions of HPWS can enhance employee job satisfaction (H1 (a): $\beta = 0.239$, t= 4.417, 95 % CI 0.124 to 0.322). This finding is also confirmed by previous researchers, and they assert that employees' perceptions of HPWS exert a significant and positive impact on employee job satisfaction (Kloutsiniotis & Mihail, 2017; Kooij et al., 2010). This study also finds that employees' perceptions of HPWS are positively related to employee motivation (H1 (b): $\beta = 0.271$, t= 4.930, 95 % CI 0.152 to 0.354). Moreover, limited studies have examined and found a positive association between these variables (Wu et al. 2001). The study data also supports Hypothesis 1 (c), that employees' perceptions of HPWS are negatively associated with employee intention to leave (H1 (c): $\beta = -0.174$, t= -3.117, 95 % CI -0.500 to -0.113). Numerous empirical studies have also found a strong negative relationship between these variables and suggest that HPWS could be instrumental in reducing employee turnover intentions among employees (Kundu & Gahlawat, 2015; Yousaf et al., 2018). Furthermore, similar findings have also been established in the healthcare setting, that employees' perceptions of HPWS lead to enhanced employee job satisfaction (Ang et al., 2013; Kloutsiniotis & Mihail, 2017) and to employees' reduced desire to leave hospitals (Ang et al., 2013; Kloutsiniotis & Mihail, 2017; Bartram et al., 2012).

Moreover, drawing on AMO theory, consistent with previous study findings, this study also provides empirical evidence that a bundle of HRM practices, denoted as ability-motivation-opportunity enhancing HR practices, are more likely to elicit positive employee

attitudes and outcomes in the workplace (Appelbaum et al., 2000; Jiang et al., 2012; Boxall & Macky, 2009). In other words, when organisations provide: more opportunities to employees to develop their abilities, talents and skills through selective recruitment; effective training and development programmes; motivation by providing attractive rewards, promotions and job security; and opportunities to be involved in decision-making, employees are likely to offer their discretionary performance behaviours (Appelbaum et al., 2000; Jiang et al., 2012).

Research Question 2

The second research question dealt with how employees' perceptions of HPWS impact employee attitudes, such as on-the-job embeddedness and job-based psychological ownership. The research finding reveal that employees' perceptions of HPWS are positively related to on-the-job embeddedness (H2: $\beta = 0.478$, t= 9.863, 95 % CI 0.355 to 0.533). Although mixed and contradictory findings have been reported in HPWS-job embeddedness literature (Bergiel et al., 2009; Tian et al., 2016), it has been suggested that HPWS serve as the way for fostering on-the-job embeddedness by creating a better fit between employees and their jobs, providing the opportunity to link with organisations and workers, and motivating employees through employee development and incentives (Mitchell et al., 2001; Bambacas & Kulik, 2013; Holtom et al., 2006). Hypothesis 3 investigated the link between employees' perceptions of HPWS and job-based psychological ownership. The study results show that employees' perceptions of HPWS can positively influence the job-based psychological ownership of employees (H3= $\beta = 0.420$, t= 8.139, 95 % CI 0.294 to 0.482). The extant literature suggests employees are more likely to sense a higher level of ownership for their jobs when they have received support,

incentives and resources, and opportunities to exercise control and autonomy and participate in job-related decisions (Han et al., 2010; O'Driscoll et al., 2006).

Research Question 3

Hypotheses 4 to 9 involved investigating research question 3, regarding how both employee attitudes relating to on-the-job embeddedness and job-based psychological ownership influence employee outcomes, namely, employee job satisfaction, employee motivation and employee intention to leave. The data support all of these hypotheses. The results demonstrate that on-the-job embeddedness is able to boost employee outcomes: employee job satisfaction (H4: β = 0. 453, t= 8.873, 95 % CI 0.354 to 0.555), employee motivation H5: β = 0. 414, t= 7.733, 95 % CI 0.310 to 0.522), and a reduced employee intention to leave (H6: β= -0.352, t= -6.479, 95 % CI -0.872, -0.466). Previous studies have also suggested that, with higher levels of job-embeddedness, employees are more likely to be satisfied, motivated and engaged in their jobs (Karatepe & Ngeche, 2012). The past literature considered job embeddedness to be a critical predictor in determining employees' voluntary turnover and intention to quit their organisation. It also highlighted that those employees who are more embedded in their jobs are more likely to stay in their current jobs (Holtom & O'Neill, 2004; Mitchell et al., 2001).

The study data also further confirms that job-based psychological ownership can have a significant and favourable impact on employee outcomes: employee job satisfaction (H7: β = 0. 443, t= 8.877, 95 % CI 0.347 to 0.545), employee motivation (H8: β = 0. 478, t= 9.511, 95 % CI 0.353 to 0.553) and a negative impact on employee intention to leave (H9: β = -0.323, t= -6.042, 95 % CI -0.818 to -0.416). A limited number of previous studies found a positive link between job-based psychological ownership and satisfaction

(Mayhew et al., 2007). The past literature suggested that employees with more psychological capital are more likely to be engaged and motivated by their jobs, and less likely to leave their jobs (Schulz et al., 2014). The past studies also suggested that job-based psychological ownership of employees reduces their employee turnover intentions. (Lu et al., 2017; Olckers & Enslin, 2016; O'Driscoll et al., 2006). Moreover, one empirical study confirmed the negative relationship between job-based psychological ownership and employee intention to leave (He & Jon, 2015).

Research Question 4

Research question 4 relates to investigating the mediating role of on-the-job embeddedness and how it further strengthens the relationship between employees' perceptions of HPWS and the three employee outcomes. The results for Hypotheses 10 and 11 confirm that on-the-job embeddedness plays a significant role in strengthening the relationship between employees' perceptions of HPWS and employee outcomes: employee job satisfaction (H10: Effect=0.204, 95%, CI 0.124 to 0.304) and employee motivation (H11: Effect=0.163, 95%, CI 0.082 to 0.259). The results also show that higher levels of job-based psychological ownership of employees weaken the negative relationship between employees' perceptions of HPWS and employees' intention to leave, as supported by Hypothesis 12 (Effect= -0.236, 95%, CI -0.355 to -0.127). The previous literature suggested that HR practices, such as providing flexible work schedules and autonomy in decision-making, stimulate both employee satisfaction and the turnover intentions of employees (Sjögren et al., 2005). Researchers also found that developing on-the-job embeddedness among employees is more likely to result in retaining them in organisations (Holtom & O'Neill, 2004; Stroth, 2010). Moreover, the literature claimed that, when employees create a better fit with their jobs and favourable links with the organisation,

colleagues and management, they demonstrate more job satisfaction and engagement in their jobs (Bergiel et al., 2009; Tian et al., 2016).

Research Question 5

Testing Hypotheses 13 to 15 answered research question 5. These hypotheses examined the mediating role of job-based psychological ownership between employees' perceptions of HPWS and employee outcomes. The results are promising, and indicate that job-based psychological ownership can be the best tool in nourishing a favourable relationship between employees' perceptions of HPWS and employee outcomes: employee job satisfaction (H13: Effect=0.181, 95%, CI 0.105 to 0.274) and employee motivation (Effect=0.175, 95%, CI 0.103 to 0.261). The finding further confirms that a strong negative association between employees' perceptions of HPWS and employee intention exists in the presence of higher levels of job-based psychological ownership of employees (H15: Effect= -0.236, 95%, CI -0.355 to -0.127). Previous studies confirmed that, when organisations provide avenues for employees to enhance their abilities and skills, motivate them through financial and non-financial rewards, engage them in decision-making, and provide greater control over their jobs, this leads employees to feel a sense of psychological ownership towards their jobs (O'Driscoll et al., 2006; Pierce et al., 2004; Md-Sidin, Sambasivan, & Muniandy, 2009). Scholars have also advocated that job-based psychological ownership produces a favourable difference in employee outcomes. Employees who feel a stronger sense of ownership towards their jobs experience increased job satisfaction and motivation, and give up their desire to leave organisations (Kuean et al., 2010; Memon et al., 2016). An empirical study also found the existence of a significant mediating effect of an organisation-based psychological ownership between HRM practices and employees' job satisfaction (Liu et al., 2017).

Research Question 6

The sixth research question investigated a moderating role of inclusive leadership between employees' perceptions of HPWS and job-based psychological ownership. As promised, the moderating mechanism of inclusive leadership did not moderate the relationship between employees' perceptions of HPWS and job-based psychological ownership (β = -.0750, t= -1.881, p= 0.060, 95%, CI -.153 to 0.003). It confirms that inclusive leadership does not always yield favourable outcomes in the workplace. However, previous inclusive leadership literature strongly established the favourable role of inclusive leadership in enhancing employee behaviours and outcomes, such as fostering innovative employee behaviour and work engagement, (Nishii & Mayer, 2009; Qingyan et al., 2018). Carmeli et al. (2010) also argued that employees are more willing to feel positive about their jobs when leaders are open, accessible and available. Nevertheless, recent researchers have attempted to disclose the dark side of inclusive leadership and its impact on employee attitudes in organisations. For example, a recent empirical study has found that inclusive leadership has a paradoxical impact on employee creativity (Zhu, Xu, & Zhang, 2020).

Research Question 7

Hypothesis 17 attempted to answer research question 7. This hypothesis proscribes that the employees' professional identity negatively moderates the relationship between on-the-job embeddedness and employee job satisfaction. The finding is as predicted (H17: β = -.0920, t= -2.6014, p= .0097, 95%, CI -.1615 to -.0224). Thus, it is suggested that when employees rate high in professional identity, they are less likely to feel that they will be required to sacrifice significantly when leaving an organisation. For instance, Raeder and Grote (2007) suggested that, when employees are well-qualified and rely on their education and

vocational training, they are more likely to search for other employment opportunities in a new job, even if they have some professional working experience in the new position; they subsequently reduce their engagement and commitment in their current jobs.

Research Question 8

Research question 8 tested the mediated, moderated investigation of professional identity on the relationship between employees' perceptions of HPWS and employee job satisfaction. The results highlight that professional identity negatively moderates the mediating effect of on-the-job embeddedness in the relationship between employees' perceptions of HPWS and employee job satisfaction (β = -.0914, t= -2.5786, p= .0104, 95%, CI -.1611 to -.0216). It is suggested that organisational HPWS efforts do not positively influence employees who are higher in professional identity. In other words, if employees identify strongly with their profession, organisational influences are less relevant. On the other hand, when employees are less focused on their profession as a source of identity, they are more likely to be strongly influenced by the organisation in which they work and, therefore, are more open to the impact of HPWS. It is also argued that the employees' professional identity is developed before organisational identification, so that even skilled employees who leave their current organisations can still use their professional title or affiliation in another organisation (Baruch & Cohen, 2007).

Overall, considering the employee-centred approach, this study has examined and empirically proved that employees' perceptions of HPWS can be a powerful tool in enriching three employee outcomes (employee job satisfaction, motivation and intention to leave). These relationships can further be strengthened with employee-level mediating mechanisms: on-the-job embeddedness and job-based psychological ownership of

employees. Moreover, remarkably, this study has also established that employees with higher levels of professional identity are less likely to be influenced by HPWS efforts and on-the-job embeddedness factors, which consequently reduces their job satisfaction. Based on the findings obtained from the empirical testing of the hypotheses, the revised conceptual framework is presented as shown in Figure 5.2. The implications of this study, including both theoretical and practical contributions, will be discussed in the following section.

5.3 Implications of the Study

The testing of a single integrated conceptual framework of this study entirely at the individual level could contribute to unlocking the *'HRM black box'* between HPWS-employee outcomes literature. Notably, this study could add some value to extending the understanding of HPWS literature and broadly strategic human resource management literature. Moreover, the study's findings will provide some guidelines to managerial practitioners, healthcare policymakers and practitioners concerned with both helping to make employees satisfied and motivated with their jobs and also, more importantly, retaining professionals within the organisations. Thus, the following section discusses the implications of this study by presenting both theoretical and practical contributions.

5.3.1 Theoretical Implications

Although growing HPWS research, consistently studied with organisational outcomes, adds more value and knowledge to existing HPWS literature (Ashiru et al., 2022; J. Y. Jiang & Liu, 2015; K. Jiang et al., 2012; B. Zhang & Morris, 2014), there is a limited understanding of how HPWS can improve employee outcomes in the workplace (Paauwe & Boselie, 2005; Wright & Nishii, 2006; Boselie et al., 2005). In other words, the

underlying mechanisms through which HPWS can enhance employee attitudes, behaviours and outcomes at the employee level are limited and, thus, require more studies to unbox this *'HRM black box'* using more employee level mediating and moderating mechanisms, from employees' perspectives (Fang et al., 2017; Wright & Nishii, 2006; Kehoe & Wright, 2013; Takeuchi et al., 2007).

Thus, the empirical evidence obtained from testing the integrated, mediated and moderated conceptual framework contributes to strategic human resource management literature and, broadly, the research field in several ways. First, this research mainly adds value to HPWS literature by placing the employee-centred approach and providing empirical evidence on how employees' perceptions of HPWS could enhance employee attitudes and outcomes in the workplace. The extant literature highlights that there is a lack of employee-centred HPWS studies (Guest, 2017; Paauwe, 2009), and that employees' views and perceptions of adopting HPWS are often ignored (Choi, 2014; Ang et al., 2013; Wright & Nishii, 2006). Further, more frequently, employees' attitudes, behaviours and outcomes have been examined merely as mediators in previous studies (Ashiru, Erdil, & Oluwajana, 2022; Jiang & Liu, 2015; Jiang, Lepak, Hu, & Baer, 2012; Zhang & Morris, 2014).

Second, drawing on AMO theory, this study also adds value to the existing theory by highlighting a bundle of HR (ability-motivation-opportunity enhancing) practices that could enhance employee attitudes significantly, such as on-the-job embeddedness and job-based psychological ownership, and on employee outcomes, such as job satisfaction, motivation and intention to leave.
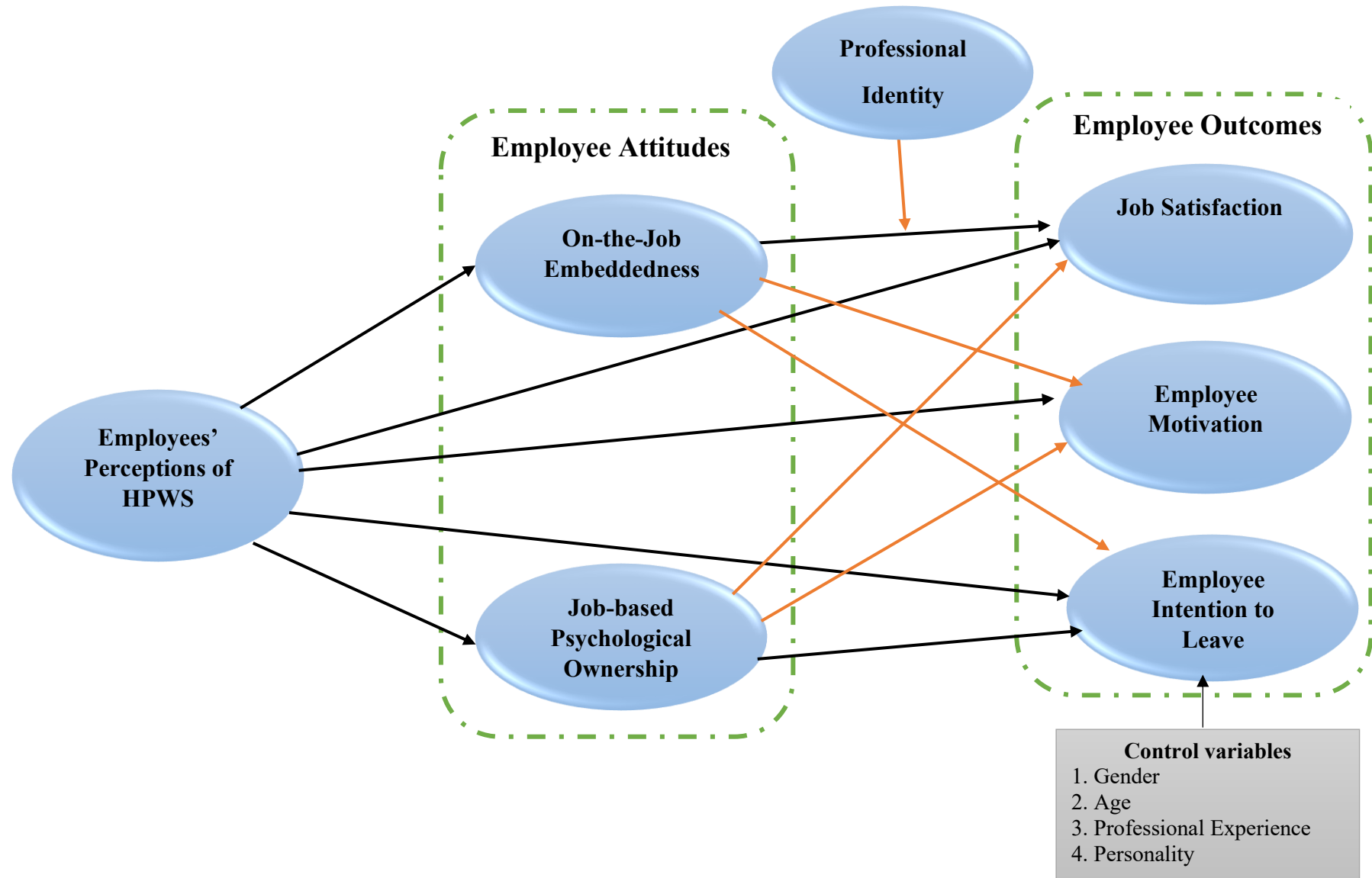
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Figure 5. 2 Revised Conceptual Framework

More specifically, adopting a coherent bundle of HR practices including ability-enhancing practices, such as selective staffing and extensive training and development; motivation-enhancing practices, such as internal mobility, performance management and compensation; employment security; and opportunity-enhancing practices, such as job clarity, participation in decision-making and communication, is more likely to produce favourable employee attitudes and outcomes in the workplace.

Third, by introducing the individual level mediating roles of on-the-job embeddedness and job-based psychological ownership between HPWS- employee outcomes relationships, this study attempts to fill the literature gap regarding how HPWS could enhance employee outcomes via increased employee-level mediators (Ang et al., 2013; Wright & Nishii, 2006; Kehoe & Wright, 2013). Notably, this study provides evidence to confirm that increasing employees' on-the-job embeddedness potentially enhances the impact of HPWS for three employee outcomes: job satisfaction, motivation and intention to leave. Although the previous literature produced some mixed, ambiguous and inconsistent findings regarding the relationship between human resource practices and employee outcomes (Karatepe & Ngeche, 2012; Bergiel et al., 2009), this study finds that on-the-job embeddedness is the best underlying individual-level mechanism with which to further strengthen and enhance the relationship between HPWS and employee outcomes. It is suggested that when employees are more embedded in their jobs, they are more likely to be satisfied and motivated, and less likely to develop intentions of leaving their jobs.

Fourth, this study also finds that job-based psychological ownership plays another possible employee level mediator through which employees' perceptions of HPWS could improve three employee outcomes: job satisfaction, motivation and intention to leave. Past studies

suggested that the psychological feelings of employees towards their jobs need to be considered (Mitchell & Lee, 2001; Van Dyne & Pierce, 2004). Thus, introducing the psychological phenomenon of psychological ownership as a mediator will add value to management and organisational behavioural literature to understand further employee behaviours and outcomes. This study provides empirical evidence that when employees have more of a sense of possession of their job, even if they do not have any financial or legal ownership, they are more likely to demonstrate favourable employee outcomes, such as increasing job satisfaction and motivation, and a reduced intention to leave their organisation (Pierce et al., 2001; Van Linn & Pierce, 2004). The previous literature also confirmed that a limited number of studies attempted to investigate psychological ownership as a mediator between HPWS and employee outcomes, primarily considering organisation-based psychological ownership. This lead to the need to consider job-based psychological ownership in HRM studies (Xu & Lv, 2018).

Fifth, this study introduces another step in the process, namely the notion of professional identity as a moderator between employees' perceptions of HPWS and employee job satisfaction, and provides empirical evidence as to how employees' professional identity negatively moderates the mediating effect of on-the-job embeddedness in the relationship between employees' perceptions of HPWS and employee job satisfaction. Although the previous literature frequently presented the positive sides of employees' professional identity, some opposing sides of professional identity have recently been quoted in literature (Baruch & Cohen, 2007). This is the first study that sheds light on this literature by empirically confirming the negative role of employees' professional identity between employees' perceptions of HPWS and their job satisfaction, through the mediating role of on-the-job embeddedness.

Last but not least, this study sheds light on a better understanding of HPWS-employee outcomes in SHRM and organisational behaviour literature regarding unlocking the '*HRM black box'* path between employees' perceptions of HPWS and employee outcomes, entirely at the employee level. Thus, in a single novel framework and with empirical evidence, this study provides more insights into the theory explaining the need to consider perceptions of HPWS and how employees' perceptions of these practices enhance employee attitudes and, subsequently, employee outcomes.

5.3.2 Practical Implications

This study provides more insights for management practitioners and healthcare policymakers and practitioners. First, this study provides practical implications for policymakers to revisit and possibly adopt a bundle of HRM practices (ability-motivation-opportunity enhancing HR practices) that are used to enhance employees' abilities and skills, motivate them to best perform their jobs, and provide avenues for employees' involvement in the decision-making process, which in turn demonstrate higher levels of favourable employee outcomes in the workplace. Second, this study informs management, policymakers and practitioners in considering employees' views, opinions and perceptions regarding the HPWS implemented in organisations. Incorporating employees' perceptions can significantly lead to enhanced employee outcomes, such as enhancing employee job satisfaction and motivation, and reducing turnover intentions among employees. As highlighted in the *'HRM black box'* issue, although organisations form and implement HRM practices at the organisational levels and request that employees adopt those practices, there are significant possibilities for employee-organisational conflicts that can lead to unfavourable employee work attitudes and behaviours in the workplace.

Regarding the mediating roles, this study provides further insights to management policymakers and practitioners for facilitating employees' positive psychological feelings towards their jobs to increase employee job satisfaction and motivation, and decrease employees' desires to leave an organisation. Although creating psychological ownership among employees will not incur any cost to organisations, how they cultivate such job-based psychological ownership amongst employees is a considerable challenge. Thus, practitioners need to find ways to warm employees' favourable psychological feelings towards their jobs by hearing and combining employees' views and opinions through arranging meetings or workshops.

This study also provides managerial implications to practitioners by suggesting that stimulating the employees' feelings of job embeddedness leads employees to perceive the HPWS efforts of an organisation positively, demonstrate themselves as happy, satisfied and motivated employees, and stay in their current organisation. Recruiting and retaining a talented workforce is another challenge (Holtom & O'Neill, 2004). When employees are dissatisfied with their jobs, they are more likely to develop an inclination to quit an organisation, which then becomes actual turnover in organisations, at a higher cost. Thus, policymakers and practitioners need to adapt and devise ways to increase the employee-level concept of on-the-job embeddedness to help make employees more involved in their jobs and manage high levels of employee turnover in the workplace. Organisations can increase job-embeddedness by ensuring that each employee has a good fit with their job, creating a healthy network within the organisation and providing more opportunities and rewards to help employees enjoy their jobs and stay in their current jobs.

This study also provides more practical implications for HRM in healthcare. It informs healthcare policymakers of the need to revise and possibly adopt a bundle of HRM practices that help employees to increase their abilities and skills, motivate them to be engaged in their jobs, and involve employees in the decision-making process. Moreover, this study provides healthcare practitioners with insights into incorporating employees' perceptions and feelings when designing and implementing HPWS practices to enhance job satisfaction and motivation, and reduce turnover intentions among healthcare professionals. This is important for healthcare, as satisfying employees is still considered to be a vital issue in the healthcare sector (Horton et al., 2007). As the public healthcare system of Sri Lanka mainly consists of young professionals, healthcare practitioners must consider young workforce views and perceptions when adopting and implementing HPWS practices. Moreover, many female employees work in the public healthcare sector, most of whom are nurses. So, when revising HRM practices, healthcare policymakers should also consider the views and opinions of female healthcare professionals to retain them with the hospitals.

This study provides more insights with which healthcare management practitioners can consider employee feelings and attitudes in the workplace, make employees more embedded, and help employees to develop psychological ownership feelings towards their jobs to manifest higher levels of employee outcomes and manage high levels of employee turnover in hospitals. Developing such positive psychological feelings toward jobs is essential for healthcare professionals to be able to deliver better patient care. In other words, when healthcare professionals love their jobs and feel a high degree of personal ownership and responsibility towards them, they are ready to demonstrate more satisfaction and motivation in their jobs. As a result, they like to stay with in jobs, which

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leads to quality patient service and care (Leggat et al., 2010). Moreover, unlike other organisational settings, the healthcare work setting often requires teamwork, so this study informs healthcare practitioners as to how to develop job-embeddedness factors, such as creating the best fit for employees' jobs and developing good links with employees in order to work effectively together. Moreover, revisiting HRM practices, such as compensation and benefits, helps retain hospital professionals. As most healthcare professionals are doctors and nurses in the Sri Lankan public healthcare sector, the developing sense of psychological ownership towards their jobs makes such professionals feel pride in their careers and remain in their current positions. Moreover, creating job fit and social links made doctors and nurses remain in their current jobs.

Recruiting and retaining a talented workforce is another challenge for healthcare organisations, and there is a high level of turnover among healthcare professionals (Holtom & O'Neill, 2004). This study provides some implications for healthcare practitioners by revealing that employees with high levels of professional identity are less likely to be influenced by HPWS practices and job embeddedness factors, and ultimately show low levels of job satisfaction. This is because healthcare professionals are usually highly professionally identified due to their affiliation or profession. Thus, healthcare policymakers and administrators need to consider this fact and devise new and unique ways to retain those talents in the current hospitals.

Moreover, the implications of the proposed study will also provide more insights for healthcare policymakers in Sri Lanka by informing them of the nature and impact of psychological ownership and on-the-job embeddedness for enhancing employee outcomes. Finally, although Sri Lanka is a developing country and its healthcare sector

operates with limited resources, it possesses a good and growing human health index (HDI) (Ministry of Health of Sri Lanka, 2006). This study provides further input for policymakers by informing them of the dark side of employees' professional identity, and how they can motivate and retain the professionals in the healthcare sector. Therefore, both in a health care setting and more broadly, the insights gained in this study can provide clear, practical contributions to management practice.

5.4 Limitations of the Study

Although this empirical study contributes to both theory and practice, some inherent limitations are identified with it. These study limitations mainly involve data collection procedures. First, the study model was tested on a sample of healthcare professionals in five public hospitals in Sri Lanka. The reasons for using a single industry in a single country were the time and cost limitations, the possibility of contacting the sample, and their higher response rate (Hair et al., 2013). Future studies may collect data from a large sample of healthcare professionals in Sri Lanka. Also, future researchers may also consider comparative studies among healthcare developing countries in order to compare the HPWS practices adopted by those countries.

Second, based on a cross-sectional and positivist research approach, the data were collected at a given time. A longitudinal survey was not considered due to time and cost limitations. Collecting data at a single time may affect the establishment of causality. Future researchers may consider a longitudinal study to avoid causality issues.

Third, the healthcare professionals who performed direct patient care were only chosen for this study if they were suitable and knowledgeable to test the study constructs, as presented in Chapter 3. Furthermore, the fact that the data were collected entirely from one source (employees) may increase the potential common method bias. However, the researcher applied some remedies, including using time-lagged data and issuing separate questionnaires for independent and dependent constructs, to mitigate these common method bias risks (Podsakoff et al., 2013). Future studies may also collect data from multiple sources, for example, managers, healthcare professionals and other healthcare workers, to examine the association between HPWS and employee outcomes.

Fourth, this study focused on only examining the HPWS at the employee level. Measuring HPWS entirely at the individual level may pose a threat to organisations, as different employee groups perceive organisationally implemented HPWS (Ang et al., 2013) differently.

5.5 Future Research Avenues

While this study provides insightful findings, it also provides some pathways for future researchers. In order to overcome the study limitations addressed above, future studies may benefit from expanding the data collection procedure in many ways. For example, future researchers may consider conducting longitudinal studies to establish the proper cause-effect associations. The integrated conceptual model can also be tested in different industries, including manufacturing, hospitality and other service organisations, to confirm how HPWS can affect employees' behaviours and outcomes in various vocational areas. Moreover, this study's conceptual model can also be examined in different countries, including western and developing countries, to compare and contrast the effects of HPWS

on employees' outcomes in different places, and examine how they can work effectively in each context.

Future studies may also consider examining the effects of HPWS and employee-level outcomes, not only amongst healthcare professionals but also among other administrative employees of hospitals, to confirm whether the same set of HR practices can work well with all employees, or if there is a need to revise HPWS practices according to employees' positions and groups (Ang et al., 2013). Moreover, the impact of HPWS on employee outcomes can also be tested amongst different groups of (managerial and non-managerial) employees in organisations. However, this study has measured the HPWS based on employees' perceptions only. Thus, future studies may investigate HPWS at both the employer and employee levels. Moreover, this study has examined the HPWS and its impacts on employee attitudes and outcomes entirely at the employee level. Specifically, this study has examined the employees' perceptions of HPWS with only three employee outcomes (employee job satisfaction, motivation and intention to leave). However, a future study may consider more employee outcomes, such as organisational commitment, organisational citizenship behaviour, innovative performance, etc. In addition, this individual-level study can be further extended to multi-level studies, whereby scholars first find out how HPWS affect individual outcomes and then subsequently impact organisational outcomes and performance.

Furthermore, this study focuses only on the impact of HPWS on employee outcomes through limited employee-level mediating mechanisms. Future researchers may investigate the impact of HPWS on employee outcomes through different employee attitudinal variables, such as emotional intelligence. Moreover, this study does not support

the moderating effect of inclusive leadership between HPWS and job-based psychological ownership. Future researchers can further extend the opposing sides and limitations of inclusive leadership: specifically, how inclusive leadership cultivates positive and negative consequences in subordinates' attitudes and behaviours.

Additionally, the current study ascertains the harmful effects of professional identity that affect the effects of HPWS on both employees' job embeddedness and satisfaction. Thus, there is a need to extend the opposing sides of the professional identities of employees, and how this can affect employees' behaviours and their decisions to stay in organisations. It would also be interesting to undertake further study on how to retain employees in organisations with higher professional identity levels.

Moreover, our study only considers employee professional identity as a moderator between HPWS and employee job satisfaction. Future research may consider 'organisational identity' as a moderator with which to examine the link between HPWS and employee job satisfaction. Despite the above future suggestions, there is a need to do any survey promptly to fill the gaps within the HPWS – employee outcomes relationships.

5.6 Concluding Remarks

To conclude, this study has attempted to unpack the '*HRM black box*' between the relationships of the HPWS-employee outcomes. This study has empirically tested an integrated conceptual framework that investigated the underlying employee-level mechanisms through which HPWS can improve the threefold employee outcomes (employee job satisfaction, employee motivation, and employee intention to leave) by situating employee research at the top. Drawing on AMO theory, this study proposed 18

hypotheses to achieve its objective. This empirical test was conducted among healthcare professionals who perform direct patient care in public hospitals in Sri Lanka. The findings reveal that employees' perceptions of HPWS are instrumental in enhancing employee job satisfaction and motivation while reducing employee intention to leave the workplace.

Moreover, both of the employee-level mediators, on-the-job embeddedness and job-based psychological ownership, play a critical role in strengthening the relationship between employees' perceptions of HPWS and employee job satisfaction and motivation, while weakening the association between employees' perceptions of HPWS and employee intention to leave. However, the results do not establish any significant moderating role of inclusive leadership in the HPWS-job-based psychological ownership relationship. Moreover, interestingly, this study finds a negative moderating role for professional identity between the HPWS-employee job satisfaction relationship. This finding informs management and healthcare practitioners of the need to focus more on retaining employees of calibre.

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Appendices

Appendix 1: First Main Survey Questionnaire

THE UNIVERSITY OF
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SURVEY PROTOCOL AND GUIDE I (Main Survey)

High Performance Work Systems and Employee Outcomes:

A Mediated Moderated Investigation into the Roles of   On-The-Job

Embeddedness and Job-Based Psychological Ownership

PART-1

This is the first part of the questionnaire which consists of 6 sections. Please allocate 30 to 45 minutes to fill in all sections of this questionnaire. Please complete this questionnaire from your own experience and perceptions. We will keep your responses strictly confidential. The information collected will be used to produce managerial guidelines and supplement doctoral research carried out for Praveena Thevisuthan's Doctor of Philosophy Degree at the University of Newcastle.

For any clarifications on this study, you may kindly contact Mrs. Praveena Thevisuthan at praveena.seenivasan@newcastle.edu.au or Associate Professor Ashish Malik at ashish.malik@newcastle.edu.au or Associate Professor Brendan Boyle at brendan.boyle@newcastle.edu.au or Professor Rebecca Mitchell at rebecca.mitchell@newcastle.edu.au.

Thank you for your precious time and cooperation, which we appreciate very much.

Section A: Demographic information

This section is about your demographic information. Please tick your response for each question.

1. Age

Below 21 ☐   21-30 ☐   31-40 ☐

41-50 ☐   51-60 ☐   Above 60 ☐

2. Gender

Male ☐   Female ☐

3. What is your profession? (eg. doctor, nurse, dentist, occupational therapist, radiographer etc.)

………………………………………………………..

4. How many years have you been working in this profession?

Below 1 ☐   2-5 ☐   6-10 ☐

11-15 ☐   Above 15 ☐

5. How many years have you been working with your current hospital?

Below 1 ☐   2-5 ☐   6-10 ☐

11-15 ☐   Above 15 ☐

6. How many years have you been working in your current job?

Below 1 ☐   2-5 ☐   6-10 ☐

11-15 ☐   Above 15 ☐

Section B: Information on High Performance Work Systems (HPWS)

Please indicate the extent to which you agree with the following statements on your perceptions of High Performance Work Systems that are implemented at your hospital. HPWS are the 'bundle' of human resource management practices mostly designed by Ministry of Health and implemented at your hospital. These practices include 1. Selective Staffing 2. Extensive Training and Development 3. Internal Mobility 4. Performance Management and Compensation 5. Employment Security 6. Job Clarity 7. Participation in Decision-Making and Communication. Please use the Seven-Point Scale provided below where 1= Strongly Disagree and 7= Strongly Agree to respond to each question.

1	2	3	4	5	6	7
Strongly Disagree						**Strongly Agree**

1. Selective Staffing

B1. Employees for this hospital are hired on the basis of **extensive recruiting efforts** made by the Ministry of Health. 1 2 3 4 5 6 7

B2. **Favoritism** is **not evident in any of the recruitment decisions** made for this hospital. 1 2 3 4 5 6 7

B3. **All appointments** in our departments are **based on merit.** (i.e. the best person for the job is selected regardless of his/her personal characteristics). 1 2 3 4 5 6 7

B4. **Only the best and trained people** are **hired** to work in this hospital. 1 2 3 4 5 6 7

2. Extensive Training and Development

B5. Employees are provided with **training opportunities** enabling them to **extend their range of skills and abilities**. 1 2 3 4 5 6 7

B6. Employees of this hospital have been **trained in a variety of skills (e.g. work-rotation).** 1 2 3 4 5 6 7

B7. Employees of this hospital have received **intensive/extensive training in job- oriented skills** (e.g. task- or job-related training). 1 2 3 4 5 6 7

B8. Professional employees of this hospital have received **intensive/extensive training in generic skills** (e.g. problem-solving, communication skills, etc.). 1 2 3 4 5 6 7

B9. A typical employee has received **sufficient hours of training** over the **last 3 years.** 1 2 3 4 5 6 7

B10. Employees in this hospital get the **opportunity to discuss their training and development requirements** with their immediate superior. 1 2 3 4 5 6 7

B11. This hospital **subsidizes, assists or reimburses** employees **for their training or courses** taken **outside of this hospital**. 1 2 3 4 5 6 7

3. Internal Mobility

B12. Employees of this hospital **hold non-entry level jobs (highest-level jobs) as a result of internal promotions** (as opposed to hired from outside of the public hospital system).

    1   2   3   4   5   6   7

B13. Employees of this hospital **hold non-entry level jobs (highest-level jobs)** due to **promotions based upon merit or performance**, as opposed to seniority.

    1   2   3   4   5   6   7

4. Performance Management and Compensation

B14. Employees of this hospital are paid **primarily on the basis of skill or knowledge** (as opposed to the particular job that they hold).

    1   2   3   4   5   6   7

B15. Employees of this hospital receive **compensation partially contingent on individual merit or performance**.

    1   2   3   4   5   6   7

B16. Employees of this hospital are paid a **premium wage** in order to attract and retain them (in comparison to similar occupations in the same industry).

    1   2   3   4   5   6   7

B17. In this hospital, the **performance management policy document** is readily available to all staff.

    1   2   3   4   5   6   7

B18. Employees of this hospital receive **formal performance appraisals** and **feedback on a routine basis**.

    1   2   3   4   5   6   7

B19. Employees of this hospital receive **formal performance feedback** from **more than one source** (i.e., feedback from several individuals such as supervisors, peers, etc.).

    1   2   3   4   5   6   7

B20. In this hospital, there is a **performance management system** to **ensure that future growth and development needs** are identified.

    1   2   3   4   5   6   7

5. Employment Security

B21. **Job security** with this hospital is almost **guaranteed**.

    1   2   3   4   5   6   7

B22. It is **very difficult to dismiss** an employee in this hospital unless they are **responsible for major misconduct.**

    1   2   3   4   5   6   7

6.   Job Clarity

B23.	**The duties** of this hopital employees' jobs are **clearly defined.**	1	2	3	4	5	6	7
B24.	This hospital employees' job has an **up-to-date description.**	1	2	3	4	5	6	7
B25.	The **job description** for a position **covered** by an employee of this hospital describes **all the duties performed.**	1	2	3	4	5	6	7

7. Participation in Decision-Making and Communication

B26.	Employees of this hospitals are often asked by their superiors **to participate in decision-making**.	1	2	3	4	5	6	7
B27.	Employees of this hospital **participate in decision-making** with regard to **work-related issues**.	1	2	3	4	5	6	7
B28.	Employees of this hospital **participate in decision-making** with regard to nature of my work activities.	1	2	3	4	5	6	7
B29.	Employees of this hospital are provided with the **opportunity to suggest improvements** in the way things are done.	1	2	3	4	5	6	7
B30.	Employees of this hospital are provided **relevant strategic information** of this hospital (e.g. strategic mission, goals, tactics etc.).	1	2	3	4	5	6	7
B31.	**Superiors keep open communication** with employees in this hospital.	1	2	3	4	5	6	7
B32.	Employees of this hospital are organized in **self-directed work teams** in performing a major part of their work roles (a group of employees who combine different skills and talents to work without the usual managerial supervision toward a common goal).	1	2	3	4	5	6	7

Section C: Information on Job-Based Psychological Ownership

To what extent do you feel a sense of psychological possession of your job, as described in the following statements? Job-based psychological ownership is the employees' sense of possession towards their job, even in the absence of financial or legal ownership. Please circle or tick answers for each statement using the scale below.

1	2	3	4	5	6	7
To a little extent						**To a great extent**

C1. I sense that this job is MINE.   1 2 3 4 5 6 7

C2. I feel a very high degree of personal ownership for this job.   1 2 3 4 5 6 7

C3. I sense that this is MY job.   1 2 3 4 5 6 7

C4. I sense that the work I do as part of my job is MINE.   1 2 3 4 5 6 7

C5. I feel a very high degree of personal ownership for the work that I   1 2 3 4 5 6 7
do.

C6. The work I do at this job is MINE.   1 2 3 4 5 6 7

C7. I feel like this job is uniquely my own.   1 2 3 4 5 6 7

C8. I feel responsible for my achievements at my job.   1 2 3 4 5 6 7

Section D: Information on On-The-Job Embeddedness

To what extent do you experience on-the-job embeddedness in your job, as described in the following statements. On-the-job embeddedness refers to the constraining forces that influence an employee's decision to remain in his or her current job. Please circle or tick answers for each statement using the scale below.

1	2	3	4	5	6	7
To a little extent						**To a great extent**

D1. My job utilizes my knowledge, skills and talents well.   1 2 3 4 5 6 7

D2. I feel like I am a good match for this hospital.   1 2 3 4 5 6 7

D3. I like my work schedule (e.g. flextime, shift overtime).   1 2 3 4 5 6 7

D4. I fit with this hospital's culture.   1 2 3 4 5 6 7

D5. If I stay with my hospital, I will be able to achieve most of my   1 2 3 4 5 6 7
professional goals.

D6.	I like the authority and responsibility I have at this hospital.	1	2	3	4	5	6	7
D7.	I am a member of an effective work unit.	1	2	3	4	5	6	7
D8.	I work closely with my co-workers in my unit.	1	2	3	4	5	6	7
D9.	On the job, I interact frequently with my work unit members.	1	2	3	4	5	6	7
D10.	I have a lot of freedom on this job to pursue my goals.	1	2	3	4	5	6	7
D11.	I would sacrifice a lot if I left this job.	1	2	3	4	5	6	7
D12.	I believe the prospects for continuing employment with my hospital are excellent.	1	2	3	4	5	6	7

Section E: Information on Inclusive Leadership

To what extent do you agree with the following statements on your perceptions about your leader (Consultant/ Surgeon/ Unit In-Charge Officer) in your unit or ward. Inclusive leadership refers to leaders who exhibit openness, accessibility, and availability in their interactions with their subordinators. They also invite and appreciate the active contribution of others. Please circle or tick answers for each statement using the scale below.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree

E1.	The leader of our unit is open to hearing new ideas.	1	2	3	4	5	6	7
E2.	The leader of our unit is attentive to new opportunities to improve work processes.	1	2	3	4	5	6	7
E3.	The leader of our unit is open to discuss the desired goals and new ways to achieve them.	1	2	3	4	5	6	7
E4.	The leader of our unit is available for consultation on problems.	1	2	3	4	5	6	7
E5.	The leader of our unit is an ongoing 'presence' in this team- someone who is readily available.	1	2	3	4	5	6	7
E6.	The leader of our unit is available to answer professional questions if l would like to consult with him/her.	1	2	3	4	5	6	7
E7.	The leader of our unit is ready to listen to my requests.	1	2	3	4	5	6	7

| E8. | The leader of our unit encourages me to access him/her on emerging issues. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| E9. | The leader of our unit is accessible for discussing emerging problems. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Section F: Information on Professional Identity

To what extent do the following statements describe your experience of the way you are/feel professionally identified with your job? Please circle or tick answers for each statement using the scale below.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree

F1.	I feel proud to be a member of my profession.	1	2	3	4	5	6	7
F2.	I feel strong ties with my professional group.	1	2	3	4	5	6	7
F3.	If I were forced to leave my profession, I would be very disappointed.	1	2	3	4	5	6	7
F4.	I feel emotionally attached to my profession.	1	2	3	4	5	6	7
F5.	I identify strongly with my profession.	1	2	3	4	5	6	7
F6.	I know who I am, professionally and in my career.	1	2	3	4	5	6	7
F7.	My sense of self includes being a member of my profession.	1	2	3	4	5	6	7
F8.	If my profession is criticised, it feels like a personal insult.	1	2	3	4	5	6	7

G. Information on Personality

How well do the following statements describe your personality? **Please note that any statement ending with R means it is a negative statement.**

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree

1. I see myself as someone is reserved. ®	1	2	3	4	5	6	7
2. I see myself as someone is generally trusting.	1	2	3	4	5	6	7
3. I see myself as someone tends to be lazy. ®	1	2	3	4	5	6	7
4. I see myself as someone is relaxed, handles stress well. ®	1	2	3	4	5	6	7
5. I see myself as someone has few artistic interests. ®	1	2	3	4	5	6	7
6. I see myself as someone is outgoing, sociable.	1	2	3	4	5	6	7
7. I see myself as someone tends to find fault with others. ®	1	2	3	4	5	6	7
8. I see myself as someone does a thorough job .	1	2	3	4	5	6	7
9. I see myself as someone gets nervous easily.	1	2	3	4	5	6	7
10. I see myself as someone has an active imagination.	1	2	3	4	5	6	7

Thank You for your participation

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Thanks for completing the first part of the questionnaire. You are now requested to complete the second part of this questionnaire. Please allocate 10-15 minutes to fill in all sections. Please complete the questionnaire based on your own experience. Your responses will be kept strictly confidential and the results will be used only for producing managerial guidelines and to supplement doctoral research carried out for Praveena's Doctor of Philosophy Degree at the University of Newcastle.

For any clarifications on this study, you may kindly contact Mrs. Praveena Thevisuthan at praveena.seenivasan@newcastle.edu.au or Associate Professor Ashish Malik at ashish.malik@newcastle.edu.au or Associate Professor Brendan Boyle at brendan.boyle@newcastle.edu.au or Professor Rebecca Mitchell at rebecca.mitchell@newcastle.edu.au.

Thank you for your precious time and cooperation, which we appreciate very much.

Section H: Information on Job Satisfaction

Below are statements of how employees generally feel and satisfy about their jobs. **Any statement ending with R means it is a negative statement.** Please circle or tick answers for each statement describing how you generally satisfy and feel about your current job, using the scale below.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

H1. I feel fairly well satisfied with my present job.	1	2	3	4	5	6	7
H2. Most days I am enthusiastic about my work.	1	2	3	4	5	6	7
H3. Each day of work seems like it will end.	1	2	3	4	5	6	7
H4. I find real enjoyment in my work.	1	2	3	4	5	6	7
H5. I consider my job rather unpleasant ®.	1	2	3	4	5	6	7

Section I: Information on Employee Motivation

Please circle or tick answers describing to what extent you agree or disagree with each statement regarding the way you feel motivated about your current job that you do.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

I1. I feel a sense of personal satisfaction when I do this job well.	1	2	3	4	5	6	7
I2. My opinion of myself goes down when I do this job badly.	1	2	3	4	5	6	7
I3. I take pride in doing my job as well as I can.	1	2	3	4	5	6	7
I4. I feel unhappy when my work is not up to my usual standard.	1	2	3	4	5	6	7
I5. I like to look back on the day's work with a sense of a job well done.	1	2	3	4	5	6	7
I6. I try to think of ways of doing my job effectively.	1	2	3	4	5	6	7

Section J: Information on Intention To Leave

To what extent do you agree or disagree with the following statements with regard to your thinking of leaving your hospital.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

J1. I often think of quitting the hospital.	1	2	3	4	5	6	7
J2. I think of searching for another position with another hospital / organisation.	1	2	3	4	5	6	7
J3. I often think of leaving the hospital within the next year.	1	2	3	4	5	6	7

Thank You for your participation