Faculty of Economics and Business

Human Resource Practices and Employee Performance in Sarawak Private Higher Education Institutions (PHEIs): Mediating Role of Self-Efficacy

Voon Boo Khoon

Doctor of Business Administration
2025

Human Resource Practices and Employee Performance in Sarawak Private Higher Education Institutions (PHEIs): Mediating Role of Self-Efficacy

Voon Boo Khoon

A dissertation submitted

In fulfillment of the requirements for the degree of Doctor of Business Administration

Faculty of Economics and Business
UNIVERSITI MALAYSIA SARAWAK
2025

DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The dissertation has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

……

Signature

Name: Voon Boo Khoon

Matric No.: 21040055

Faculty of Economics and Business

Universiti Malaysia Sarawak

Date : 30 April 2025

ACKNOWLEDGEMENT

First and foremost, I extend my deepest gratitude to my wife, Hephi, and my children, Celine and Cayden, whose unwavering support and unconditional love have been the foundation of my strength and perseverance throughout this academic journey. Your encouragement and belief in me have been invaluable, and I am forever grateful for your constant presence.

I am also profoundly grateful to my family, whose support has been a continuous source of motivation. Your belief in my abilities has provided me with the resilience to overcome challenges and stay focused on my goals.

Additionally, I wish to express my immense gratitude to my supervisor, Associate Professor Dr. Helen Tan Sui Hong, for her expert guidance and steadfast support. Dr. Tan's insightful feedback, meticulous attention to detail, and unwavering dedication significantly enhanced the quality of my research and contributed to my personal growth as a scholar. Her mentorship was instrumental in navigating the complexities of my research, and I deeply appreciate her commitment.

To all those who supported me in any capacity during the completion of this thesis, I extend my sincere thanks.

ABSTRACT

The competitiveness, success and sustainability of Private Higher Education Institutions (PHEIs) hinge upon various factors and most importantly, the interplay between human resource (HR) practices and employee's performance in the light of the rapid changes in the business environment. However, how individuals respond to organizational efforts require further understanding. Therefore, this study investigates the impact of HR practices, specifically training and development, job rotation, career planning, and job involvement on employee performance in PHEIs in Sarawak, Malaysia, with a focus on the mediating role of self-efficacy. Framed within Social Exchange Theory (SET) and the Ability-Motivation-Opportunity (AMO) Theory, the research aims to understand how these HR practices contribute to enhanced employee performance. Data were collected through an online survey across 27 PHEIs, resulting in 452 responses from both academic and non-academic staff using purposive sampling. The analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). The key findings revealed that the relationship between HR practices and employee performance is significant, where job involvement shows the strongest influence, followed by training and development, job rotation and career planning. In addition, self-efficacy was found to significantly mediate the relationship between HR practices and employee performance. Theoretically, the findings highlight the importance of strategic HR interventions in fostering a motivated and capable workforce in line with AMO Theory. The practical contributions include enhancing HR practices, improving staff retention, emphasizing leadership development, and guiding policymakers on continuous professional development (CPD) and career progression to strengthen employee performance and PHEIs. Recommendations for future research include exploring additional

HR practices and mediators in different educational contexts to develop HR strategies that improve employee performance.

Keywords: Training and development, job rotation, career planning, job involvement, self-efficacy

Amalan Sumber Manusia dan Prestasi Pekerja di Institusi Pendidikan Tinggi Swasta (IPTS) Sarawak: Peranan Pengantara Efikasi Kendiri

ABSTRAK

Daya saing, kejayaan, dan kelestarian Institusi Pengajian Tinggi Swasta (IPTS) bergantung kepada pelbagai faktor, terutamanya interaksi antara amalan sumber manusia (HR) dan prestasi pekerja dalam menghadapi perubahan pesat dalam persekitaran perniagaan. Walau bagaimanapun, bagaimana individu bertindak balas terhadap usaha organisasi memerlukan pemahaman yang lebih mendalam. Oleh itu, kajian ini menyelidik kesan amalan HR, khususnya latihan dan pembangunan, putaran kerja, perancangan kerjaya, dan penglibatan kerja terhadap prestasi pekerja di IPTS di Sarawak, Malaysia, dengan memberi tumpuan kepada peranan pengantara efikasi kendiri. Berdasarkan Teori Pertukaran Sosial (SET) dan Teori Keupayaan-Motivasi-Peluang (AMO), kajian ini bertujuan untuk memahami bagaimana amalan HR ini menyumbang kepada peningkatan prestasi pekerja. Data dikumpul melalui tinjauan dalam talian di 27 IPTS, menghasilkan 452 respons daripada kakitangan akademik dan bukan akademik menggunakan pensampelan bertujuan (purposive sampling). Analisis data dijalankan menggunakan Partial Least Squares Structural Equation Modeling (PLS-SEM). Penemuan utama menunjukkan bahawa hubungan antara amalan HR dan prestasi pekerja adalah signifikan, di mana penglibatan kerja memberikan pengaruh paling kuat, diikuti oleh latihan dan pembangunan, putaran kerja, dan perancangan kerjaya. Selain itu, efikasi kendiri didapati menjadi pengantara yang signifikan dalam hubungan antara amalan HR dan prestasi pekerja. Dari segi teori, penemuan ini menekankan kepentingan intervensi HR yang strategik dalam membentuk tenaga kerja yang bermotivasi dan berkemampuan, selaras dengan Teori AMO. Sumbangan praktikal termasuk meningkatkan amalan HR, meningkatkan pengekalan kakitangan,

menekankan pembangunan kepimpinan, dan membimbing penggubal dasar mengenai pembangunan profesional berterusan (CPD) dan perkembangan kerjaya untuk memperkukuh prestasi pekerja dan PHEI. Cadangan untuk penyelidikan masa hadapan termasuk meneroka amalan HR tambahan dan peranan pengantara dalam konteks pendidikan yang berbeza untuk membangunkan strategi HR yang berkesan dalam meningkatkan prestasi pekerja.

Kata kunci: *Latihan dan pembangunan, putaran kerja, perancangan kerjaya, penglibatan kerja, efikasi kendiri*

TABLE OF CONTENTS

	Page
DECLARATION	i
ACKNOWLEDGEMENT	ii
ABSTRACT	iii
ABSTRAK	*v*
TABLE OF CONTENTS	vii
LIST OF TABLES	xiv
LIST OF FIGURES	xvi
LIST OF ABBREVIATIONS	xvii
CHAPTER 1: INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the Study	1
1.3 Problem Statement	9
1.4 Research Questions	12
1.5 Research Objectives	13
1.6 Significance of the Study	14
1.6.1 Theoretical Significance	14
1.6.2 Practical Significance	18

1.7 Scope of the Research 20

1.8 Operational Definitions 21

1.8.1 Employee Performance 22

1.8.2 Training and Development 22

1.8.3 Job Rotation 22

1.8.4 Career Planning 23

1.8.5 Job Involvement 23

1.8.6 Self-Efficacy 23

1.9 Organization of the Dissertation 23

CHAPTER 2: LITERATURE REVIEW 25

2.1 Introduction 25

2.2 Concept of Employee Performance 25

2.2.1 Dimensions of Employee Performance 26

2.3 Concept of Human Resource Management 30

2.4 Human Resource Management Practices 31

2.5 Factors Affecting Employee Performance 32

2.5.1 Training and Development 33

2.5.2 Job Rotation 35

2.5.3 Career Planning 37

2.5.4 Job Involvement 39

2.5.5 Self-Efficacy 41

2.6 Underpinning Theories of the Research 43

2.6.1 Social Exchange Theory (SET) 44

2.6.2 Ability–Motivation–Opportunity Theory (AMO) 48

2.6.3 Justification of Selected Theories 52

2.7 Literature Gap 53

2.8 Conceptual Framework 55

2.9 Hypotheses Development 57

2.9.1 Relationship between training and development, and employee performance 58

2.9.2 Relationship between training and development and self-efficacy 59

2.9.3 Relationship between job rotation and employee performance 60

2.9.4 Relationship between job rotation and self-efficacy 62

2.9.5 Relationship between career planning and employee performance 64

2.9.6 Relationship between career planning and self-efficacy 65

2.9.7 Relationship between job involvement and employee performance 66

2.9.8 Relationship between job involvement and self-efficacy 67

2.9.9 Relationship between self-efficacy and employee performance 68

2.9.10 Mediating Effect of Self-Efficacy 69

2.10 Summary of Important Literature Review of Past Studies 72

2.11 Chapter Summary 86

CHAPTER 3: METHODOLOGY 87

3.1 Introduction 87

3.2 Research Paradigm 87

3.3 Research Design 89

3.4 Research Population and Sampling 90

3.4.1 Population of the Study 90

3.4.2 Sample Size 92

3.4.3 Sampling Techniques 95

3.5 Unit of Analysis 95

3.6 Questionnaire Design 96

3.6.1 Demographic Information 96

3.6.2 Rating Scale 97

3.6.3 Measurement of Constructs 97

3.7 Preliminary Test Study 104

3.7.1 Expert Evaluation 105

3.7.2 Cognitive Interviewing 105

3.8 Methods of Data Collection 109

3.9 Data Analysis Techniques 110

3.9.1 Data Screening and Preliminary Analysis 111

3.9.2 Descriptive Statistics 111

3.9.3 Reliability of Research Instrument 112

3.9.4 Harman's Single Factor Test 113

3.9.5 Assessment of Measurement Model (Reflective) 113

3.9.6 Assessment of Structural Model 115

3.10 Chapter Summary 118

CHAPTER 4: DATA ANALYSIS AND RESULTS 120

4.1 Introduction 120

4.2 Response Rate 120

4.3 Data Screening and Preliminary Analysis 121

4.3.1 Missing Data Screening 122

4.3.2 Straight Lining 124

4.3.3 Normality Test 124

4.3.4 Multicollinearity Test 126

4.4 Common Method Variance 128

4.5 Respondents Profile 130

4.5.1 Location of Institution 132

4.5.2 Staff Category 132

4.5.3 Gender 133

4.5.4 Age 133

4.5.5 Marital Status 134

4.5.6 Race/Ethnicity 134

4.5.7 Highest Education Attained 135

4.5.8 Number of Years with Present Institution 136

4.6 Assessment of Measurement Model (Reflective) 137

4.6.1 Internal Consistency Reliability 137

4.6.2 Indicator Reliability (Outer Loading) 139

4.6.3 Convergent Validity 140

4.6.4 Discriminant Validity 142

4.7 Assessment of Structural Model 146

4.7.1 Assessment of the Structural Model for Collinearity Issues 147

4.7.2 Significance and Relevance of the Structural Model Relationships 148

4.7.3 Assessment the Level of R^2 (Coefficient of Determination) 152

4.7.4 Assessment the Level of Effect Size (f^2) 153

4.7.5 Assessment of the Predictive Relevance (Q^2) 156

4.7.6 Assessment of Mediation Analysis 157

4.8 Chapter Summary 160

CHAPTER 5: DISCUSSION AND CONCLUSION 162

5.1 Introduction 162

5.2 Recapitulation of Study 162

5.3 Discussion of the Findings 164

5.3.1 Research Question 1 165

5.3.2 Research Question 2 173

5.3.3 Research Question 3 178

5.3.4 Research Question 4 179

5.4 Research Implications 186

5.4.1 Theoretical Implications 186

5.4.2 Practical Implications 189

5.5 Limitations of the Study 193

5.6 Recommendations for Future Research 195

5.7 Chapter Summary 197

REFERENCES 200

APPENDICES 255

LIST OF TABLES

		Page
Table 1.1	Statistics of PHEIs by Status in Malaysia as of 31 May 2024	2
Table 1.2	Statistics of PHEIs by State in Malaysia as of 31 May 2024	2
Table 1.3	Statistics of PHEIs with Approval of International Student Recruitment	3
Table 1.4	Statistics of PHEIs by Number of Academic Staff and Students Intake	5
Table 1.5	Number of Academic and Non-Academic Staff	21
Table 2.1	Literature Review Summary	73
Table 3.1	Number of Academic and Non-Academic Staff	91
Table 3.2	Measurement of Training and Development Variable	99
Table 3.3	Measurement of Job Rotation Variable	100
Table 3.4	Measurement of Career Planning Variable	101
Table 3.5	Measurement of Job Involvement Variable	102
Table 3.6	Measurement of Self-Efficacy Variable	102
Table 3.7	Measurement of Employee Performance Variable	103
Table 3.8	Outcomes of Pre-Test	107
Table 3.9	Cronbach's Alpha Value Interpretation Table	113
Table 3.10	Summaries of Indices for Measurement Analysis	115
Table 4.1	Constructs / Items Coding	121
Table 4.2	The Sources of Survey Respondents Received	123
Table 4.3	The Skewness and Kurtosis Coefficient for Normality Verification	125
Table 4.4	Correlation Matrix of the Independent Variables	126
Table 4.5	Results of Multicollinearity Test	128
Table 4.6	Harman's Single-factor Test (Total Variance Explained)	129

Table 4.7	Respondents' Profile	131
Table 4.8	Results of Construct Reliability and Validity	138
Table 4.9	Values of Factor Loadings	139
Table 4.10	Results of Reflective Measurement Mode	141
Table 4.11	Discriminant Validity using Fornell and Lacker Criterion	143
Table 4.12	Cross-Loading	144
Table 4.13	HTMT Criterion	146
Table 4.14	Structural Model Assessment	151
Table 4.15	Model's Predictive Power	157

LIST OF FIGURES

		Page
Figure 2.1	Generic Model of Social Exchange	45
Figure 2.2	AMO Model	49
Figure 2.3	Conceptual Framework of the Study	56
Figure 3.1	G*Power Calculation	94

LIST OF ABBREVIATIONS

AMO	Ability, Motivation and Opportunity
AVE	Average Variance Extracted
BCI	Bias-corrected confidence intervals
CMV	Common Method Variance
CP	Career Planning
CPD	Continuous Professional Development
DV	Dependent Variable
EP	Employee Performance
F^2	Level of Effect Size
GDP	Gross Domestic Product
HR	Human Resource Management
HTMT	Heterotrait-Monotrait Ratio
IV	Independent Variable
JI	Job Involvement
JR	Job Rotation
MAE	Mean Absolute Error
MOHA	Ministry of Home Affairs
MOHE	Ministry of Higher Education
MQA	Malaysian Qualifications Agency
PCDS	Post-COVID Development Strategies
PHEIs	Private Higher Education Institutions
PLS	Partial Least Square
PLS-SEM	Partial Least Squares Structural Equation Modelling

Q^2	Predictive Relevance
RMSE	Root Mean Square Error
R^2	Level of Coefficient of Determination
SE	Self-Efficacy
SEM	Structural Equation Modeling
SET	Social Exchange Theory
TD	Training and Development
VIF	Variance Inflation Factor

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter provides an overview of the study's background by discussing the emergence of human resource management (HR) practices and employee performance, with a focus on the mediating role of self-efficacy within the context of private higher education institutions (PHEIs) in Sarawak. It then highlights the problem statement, research objectives, and research questions. The chapter continues with a discussion on the study's contributions and scope. Finally, this chapter provides the definition of key terms and a brief summary.

1.2 Background of the Study

PHEIs in Sarawak were crucial to Malaysia's higher education sector, providing essential educational services and contributing significantly to the socio-economic development of the region. According to the Ministry of Higher Education Malaysia (MOHE), PHEIs accounted for 390 of the higher education institutions in the country, with 27 located in Sarawak. Among these, 18 institutions had received approval for international student recruitment from the Ministry of Home Affairs (MOHA), highlighting their pivotal role in shaping the nation’s future workforce and contributing to both national and state gross domestic product (GDP). Tables 1.1, 1.2, and 1.3 referred to the breakdown of statistics of PHEIs in Malaysia.

Table 1.1: Statistics of PHEIs by Status in Malaysia as of 31 May 2024

Status	**Number**
University	63
Branch Campus of Foreign Universities	10
University College	33
University College	284
Total	390

Note: Jabatan Pendidikan Tinggi (2024)

Table 1.2: Statistics of PHEIs by State in Malaysia as of 31 May 2024

No.	**State**	**University**	**Branch Campus of Foreign Universities**	**University College**	**College**	**Number**
1	Sarawak	2	2	1	22	27
2	Selangor	24	3	9	73	109
3	Kuala Lumpur	16	-	5	65	86
4	Pulau Pinang	1	1	4	21	27
5	Johor	2	3	2	18	25
6	Negeri Sembilan	5	-	1	16	22
7	Sabah	-	-	4	17	21
8	Perak	4	-	-	13	17
9	Melaka	1	-	2	10	13
10	Pahang	3	-	1	7	11
11	Terengganu	1	-	2	7	10
12	Kedah	3	-	-	6	9
13	Kelantan	-	-	1	6	7
14	Perlis	1	-	1	1	3
15	Putrajaya	-	1	-	1	2
16	Labuan	-	-	-	1	1
Total		63	10	33	284	390

Note: Jabatan Pendidikan Tinggi (2024)

Table 1.3: Statistics of PHEIs with Approval of International Student Recruitment

No.	State	University	Branch Campus of Foreign Universities	University College	College	Number
1	Sarawak	3	2	1	12	18
2	Selangor	32	3	8	53	96
3	Kuala Lumpur	15	-	5	44	64
4	Pulau Pinang	2	1	3	15	21
5	Johor	4	3	2	7	16
6	Negeri Sembilan	5	-	1	8	14
7	Sabah	1	-	4	12	17
8	Perak	6	-	-	4	10
9	Melaka	3	-	2	6	11
10	Pahang	3	-	2	-	5
11	Terengganu	1	-	2	1	4
12	Kedah	4	-	-	1	5
13	Kelantan	-	-	1	1	2
14	Perlis	-	-	1	-	1
15	Putrajaya	-	1	-	-	1
16	Labuan	-	-	-	-	-
Total		79	10	32	164	285

Note: Jabatan Pendidikan Tinggi (2024)

According to the 2023 statistics for Private Higher Education Institutions (PHEIs), the number of student intakes had reached 180,123, with enrolments totaling 558,692 and 110,154 graduates (Ministry of Higher Education, 2024). The total student enrolment for 2023 had been 1,247,908, including 16,327 students based in PHEIs in Sarawak. Additionally, 66,908 students, or 41.9%, were international, highlighting the importance of providing quality education. The Malaysian government had anticipated that the education sector would drive the services sector to comprise 70% of GDP, with contributions projected to grow from RM31.5 billion in 2018 to RM84 billion by 2030, at an annual growth rate of 5% to 6% (MIDA, 2024). This highlighted the critical need for PHEIs to emphasize staff performance to ensure quality education for all students (Ministry of Higher Education, 2024).

PHEIs in Sarawak not only addressed the educational needs of the region but also played a pivotal role in producing a skilled workforce that met both local and national demands. This economic impact was further emphasized in the Post COVID-19 Development Strategy 2030 (PCDS) for Sarawak, which prioritized human capital development and technological advancement as key drivers of regional growth.

The number of academic staff in PHEIs in 2023 was 28,736, representing 40.8% of the total academic staff, with 27,132 being Malaysian and 1,604 non-Malaysian (Ministry of Higher Education, 2024). Therefore, the effectiveness of HR practices was crucial for the performance and sustainability of PHEIs. HR practices such as training and development, job rotation, career planning, and job involvement were directly linked to employee performance, which in turn affected the overall performance of PHEIs. These practices were essential for maintaining a high-quality educational environment capable of adapting to changing demands (Amin et al., 2014; Yadav et al., 2022). Given the significant proportion of academic staff and the essential roles of non-academic personnel, implementing comprehensive HR strategies is vital. Such practices ensure that all employees are well-equipped, motivated, and aligned with the institution's goals, thereby fostering a high-quality educational environment capable of adapting to evolving demands.

Table 1.4: Statistics of PHEIs by Number of Academic Staff and Students Intake

Year	Number of PHEIs	Number of Academic Staff	Number of Students Intake
2024	388	NA	NA
2023	416	28,736	180,123
2022	434	29,413	171,889
2021	435	28,570	164,760
2020	443	24,727	165,158
2019	451	25,961	182,852

Note: Jabatan Pendidikan Tinggi (2024)

From 2019 to 2024, the number of PHEIs in Malaysia decreased from 451 to 388 (refer to Table 1.4), reflecting a trend of consolidation or institutional closures (Ministry of Higher Education, 2024). Concurrently, the number of academic staff increased from 24,727 in 2020 to a peak of 29,413 in 2022, before slightly decreasing to 28,736 in 2023. Student intake fluctuated, with the highest intake recorded in 2019 at 182,852 students and the lowest in 2021 at 164,760, showing a partial recovery to 180,123 in 2023. These trends highlighted the dynamic nature of the higher education sector in Malaysia and highlighted the critical need to analyze staff performance from a HR perspective. As the number of institutions decreased, the competition for quality education intensified, making it imperative for remaining PHEIs to optimize their HR practices to enhance staff performance and institutional resilience. Effective HR practices, such as training, career development, and job involvement, were crucial for maintaining high staff performance, which directly impacted the quality of education, student satisfaction, and the overall sustainability of PHEIs. This strategic focus on HR was essential for PHEIs to remain competitive, attract and retain students, and contribute positively to the national educational landscape.

However, many PHEIs in Sarawak faced significant challenges that impacted their HR practices and, consequently, their performance. The challenges encountered by PHEIs

in Sarawak were diverse. Financial limitations restricted comprehensive training and development, leading to a skills deficit (Nurin et al., 2022 and Yong et al., 2024). Maintaining high standards of education and administrative processes amidst rapid expansion and increased student enrollment was critical. Integrating new technologies in teaching and administration required continuous upskilling of staff, which was often neglected due to budget constraints. These challenges necessitated a strategic approach to HR that not only addressed these issues but also leveraged the potential of employees to achieve institutional goals.

The importance of talent development and capacity building, as highlighted by Datuk Seri Mohamed Khaled Nordin, directly aligns with HR practices in improving employee performance within organizations. In Sarawak's PHEIs, the lack of continuous training and development can hinder employee growth and institutional performance. A World Economic Forum report states that 41% of the global workforce will require retraining within the next five years (Bernama, 2023). Additionally, while 97% of Malaysians express interest in learning and development opportunities, only 36% reported receiving training from their employers in the past 12 months (Chau, 2022). This statistic underscores the necessity for PHEIs to adopt strategic HR practices, focusing on training and development, to maintain competitiveness and boost employee confidence and effectiveness.

The success and sustainability of PHEIs in Sarawak were intrinsically linked to the effectiveness of their HR practices. Academic staff were the pillars of educational quality and innovation, while non-academic staff ensured smooth administrative operations and student support services. In the context of the Post-COVID Development Strategies (PCDS) 2030 Sarawak, which emphasized human capital development and technological

advancement, it was imperative that PHEIs in Sarawak adapted their HR practices to align with these strategic goals. The post-pandemic landscape had brought significant changes in education delivery and management, highlighting the need for flexibility, innovation, and resilience in HR practices. By addressing current challenges and leveraging opportunities for improvement, PHEIs could enhance their competitiveness, attract and retain top talent, and contribute significantly to the region's economic recovery and growth.

Job rotation has been proposed as a strategy to alleviate the issue of overworked and improve job satisfaction, particularly for mid-career professionals. In Malaysian public universities, academic staff workloads vary between institutions and ranks, with teaching responsibilities often constituting a smaller portion of their duties. This shift leads many academics to prioritize research, consultancy, and publications, which carry more weight in performance appraisals and promotions, potentially impacting teaching quality and graduate capabilities (Yaacob et al., 2018). The lack of work-life balance, burnout, and frustration with administrative tasks contribute to a growing trend of resignations. By implementing job rotation, universities can redistribute workloads, provide employees with new challenges, and potentially reduce the stressors that lead to job dissatisfaction and resignations. This aligns with the findings of the 2021 Nature Careers Survey, where burnout and frustration were cited as major reasons for job dissatisfaction among over 3,200 respondents globally (Wan, 2022).

The lack of career progression significantly impacts turnover and performance in higher education. According to Mercer, 57% of employers in Malaysia attribute employee attrition to dissatisfaction with pay, followed by 41% due to limited career advancement opportunities. This is particularly evident at the mid-career level, where career stagnation

lowers motivation, leading to decreased productivity among both academic and non-academic staff (Amir, 2021). Additionally, 43% of Gen Z employees prioritize upskilling, highlighting the need for development opportunities to enhance staff retention and performance (Sharen, 2024).

Employee engagement significantly impacts job involvement for both academic and non-academic staff. A global survey of over 37,000 employees, including 500 Malaysians, revealed a decline in key engagement metrics, with Malaysia ranking 7th globally at 54% engagement (Nursyazwani, 2023). Engagement and inclusion indicators dropped from 82% in 2023 to 76% in 2024, particularly affecting non-academic staff who exhibit lower job involvement due to a lack of recognition and support (Lai, 2023). Addressing these issues through feedback and leadership can enhance job involvement for PHEIs in Sarawak.

Therefore, the performance of PHEIs in Sarawak was intrinsically linked to the effectiveness of their HR practices. The HR practices including training and development, job rotation, career planning, and job involvement were critical factors that influenced employee performance. Self-efficacy served as a key mediator in this relationship, emphasizing the need to cultivate a supportive and empowering work environment. By addressing the challenges faced by PHEIs and implementing effective HR practices, these institutions enhanced their competitiveness, attracted and retained top talent, and contributed significantly to the socio-economic development of Sarawak and Malaysia. This study aimed to deliver an in-depth analysis of these dynamics, offering valuable insights for improving HR practices and PHEIs' employee performance in Sarawak.

1.3 Problem Statement

Globally, performance issues were a central concern among organizational leaders, as employee performance was recognized as a measurable indicator of organizational success (Aguinis & Pierce, 2008; Ampong, 2024; Chanda & Goyal, 2019; Esteban-Lloret et al., 2016; Gutterman, 2023; Huang, et al., 2022; Ogbonnaya & Valizade, 2016).

The Sarawak government's plan to offer free tertiary education by 2026, focusing on science and technical courses, aims to enhance the state's human capital and economic growth (Borneo Post, 2024). This policy primarily benefits students attending state-owned institutions, leaving Private Higher Education Institutions (PHEIs) to compete for student enrollment and financial sustainability. In this context, understanding and enhancing employee performance within PHEIs becomes crucial, as it directly influences teaching quality, research output, and institutional reputation, thereby ensuring these institutions remain competitive amidst policy shifts favoring public institutions.

Numerous factors contributed to organizational performance, with one of the most frequently cited being that an organization largely depended on the quality of its members' skills, whether skilled or unskilled, who were the employees (Nyaupane et al., 2020; Pearl Dlamini et al., 2022; Tensay & Singh, 2020). Previous studies demonstrated that HR practices had a proven influence on employees' performance, which, in turn, directly affected organizational performance. These factors included training and development (Aktar, 2023; Al-refaei, 2021; Obasi & Wokoma, 2018; Okolie et al., 2020; Sifawa & Mukasa, 2024; Walker & Derbyshire, 2020), job rotation (Abd Rashid et al., 2022; Gabriel et al., 2020; Gubicza & Remsei, 2024; Suleman et al., 2022; Yakubu & Majeed, 2018), career planning (Arhipova & Kokina, 2022; Litynska, 2023; Nava-Macali et al., 2019; Shastri, 2023; Suparjo

& Nurchayati, 2022; Tabiu et al., 2016; Van der Heijden et al., 2022; Widi & Kusuma, 2023), and job involvement (Ahmad et al., 2021; Bastian & Widodo, 2022; Gopinath et al., 2020; Mirzaei-Alavijeh et al., 2020; Prasetyo et al., 2021; Septiadi et al., 2017; Suparna & Noor, 2021). These past studies primarily concentrated on the direct relationship between these influencing factors and employees' performance.

Specific HR practices such as training and development, job rotation, career planning, and job involvement are instrumental in this context. Training and development initiatives equip employees with the necessary skills and knowledge, directly enhancing their abilities and performance. Job rotation exposes employees to various roles within the organization, broadening their skill sets and fostering a comprehensive understanding of organizational operations. Career planning aligns individual aspirations with organizational goals, motivating employees to achieve higher performance levels. Job involvement encourages employees to engage deeply with their tasks, increasing motivation and commitment. Collectively, these practices not only enhance individual competencies but also create an environment conducive to sustained organizational success.

However, despite the extensive body of research on HR practices, the mechanisms through which these practices influenced employee performance with self-efficacy as the mediator remained underexplored, particularly within the context of PHEIs. Recent studies suggested that self-efficacy, defined as the belief in one's ability to accomplish tasks, might serve as a critical mediator in this relationship (Ferrari, 2022; Galos & Aldridge, 2021; Goulart et al., 2022; Mata et al., 2021; Martini et al., 2023; Noe et al., 2019; Otoo, 2024; Yusnita, 2021; Yusuf, 2024). Thus, a gap existed in the limited understanding of how self-efficacy mediated employee performance within the education sector.

In examining the relationship between HR practices and employee performance, self-efficacy is proposed as a mediator rather than a moderator due to its intrinsic role in influencing how HR practices translate into performance outcomes. As a mediator, self-efficacy serves as an internal psychological mechanism through which HR practices such as training and development, job rotation, career planning, and job involvement enhance employee performance. For instance, effective training programs can bolster an employee's belief in their capabilities, leading to improved performance. Similarly, job rotation and career planning can expand skill sets and clarify career trajectories, thereby strengthening self-efficacy and, consequently, performance. This mediating role underscores the process by which HR practices impact performance through their effect on self-efficacy.

Furthermore, previous studies (Caliskan & Koroglu, 2022; Carter et al., 2018; Irshad et al., 2021; Johari et al., 2022; Somuah et al., 2024) highlighted the gap in research, noting that the effect of different HR practices on employee performance remained underexplored in the educational context. Therefore, there was a need for further research that incorporated a broader understanding of employee performance and examined the impact of various HR practices across different contexts. Understanding these relationships was essential for developing strategies to enhance performance and productivity, thereby strengthening the overall success and competitive edge of these institutions (Alkhalailah & Mjlae, 2023; Halid, 2020; Ooi, 2022; Tengah, 2022).

The relationship between HR practices and employee performance can be effectively understood through the lenses of Social Exchange Theory (SET) and the Ability-Motivation-Opportunity (AMO) framework. SET posits that interactions between employers and employees are based on reciprocal exchanges; when employees perceive favorable

treatment, such as investment in their development, they are likely to respond with increased commitment and performance. The AMO framework further elucidates this relationship by suggesting that employee performance is a function of their abilities, motivation, and the opportunities provided by the organization. HR practices that enhance skills (ability), drive (motivation), and provide avenues for application (opportunity) are thus pivotal in fostering superior performance.

This study investigates how self-efficacy mediates the relationship between specific HR practices—training and development, job rotation, career planning, and job involvement—and employee performance within Private Higher Education Institutions (PHEIs) in Sarawak, aiming to enhance institutional effectiveness and competitiveness.

1.4 Research Questions

Based on the aforementioned arguments and discussions in the problem statement, the present study attempted to answer the following research questions:

1. What is the relationship between HR practices in terms of training and development, job rotation, career planning and job involvement with employee performance in PHEIs in Sarawak?
2. What is the relationship between HR practices in terms of training and development, job rotation, career planning and job involvement with self-efficacy in PHEIs in Sarawak?
3. What is the relationship between self-efficacy and employee performance in PHEIs in Sarawak?

4. Does self-efficacy mediate the relationship between HR practices in terms of training and development, job rotation, career planning and job involvement with employee performance in PHEIs in Sarawak?

1.5 Research Objectives

The primary objective of this research was to examine the influence of HR practices on academic and non-academic staff performance and to explain the relationship between these practices and their performance. The study also aimed to assess, in the context of PHEIs in Sarawak, the mediation role of self-efficacy in the relationship between HR practices and employee performance.

The dependent variable in this research was employee performance, while the independent variables comprised four HR practices, namely training and development, job rotation, career planning, and job involvement. Self-efficacy was investigated as the mediating variable. The research objective was supported by four specific objectives, as follows:

1. To examine the relationship between HR practices in terms of training and development, job rotation, career planning, and job involvement, and employee performance in PHEIs in Sarawak.
2. To examine the relationship between HR practices in terms of training and development, job rotation, career planning, and job involvement, and self-efficacy in PHEIs in Sarawak.
3. To examine the relationship between self-efficacy and employee performance in PHEIs in Sarawak.

4. To investigate the mediating effect of self-efficacy in the relationship between HR practices in terms of training and development, job rotation, career planning, and job involvement, and employee performance in PHEIs in Sarawak.

1.6 Significance of the Study

This study aimed to contribute to the understanding of the most effective HR practices that enhance employee performance in PHEIs in Sarawak, using self-efficacy as a mediator. It was expected to benefit both scholars and practitioners by providing insights into methods for improving employee performance, with potential applications extending beyond the PHEI context. The subsequent sections discussed the theoretical and practical significance of this study.

1.6.1 Theoretical Significance

The present study attempted to address multiple gaps and, in doing so, made important contributions. Theoretically, this study contributed significantly to the fields of HR and employee performance literature.

First, the study extended the limited research on the understanding of HR practices—specifically training and development, job rotation, career planning, and job involvement—and their impact on employee performance. This study offered empirical evidence on the significant influence of HR practices, as perceived by employees, on their performance. This contribution was particularly relevant in the context where PHEIs in Sarawak increasingly focused on enhancing employee performance through effective HR practices (Abdullahi et al., 2022; Raiya Umar et al., 2020; Siyal et al., 2020; Tashliyev & Tirtoprojo, 2023). By highlighting the importance of employee perceptions of HR practices, the study contributed

to the existing body of knowledge and offered practical implications for improving employee performance.

Second, the study expanded the limited research on the relationship between HR practices and self-efficacy. It provided empirical evidence demonstrating the significant impact of HR practices, as perceived by employees, on their self-efficacy. Previous research had shown that HR practices such as training and development, job rotation, career planning, and job involvement could significantly impact an employee's self-efficacy by equipping them with the necessary skills, knowledge, and opportunities (Erum et al., 2020; Goulart et al., 2022; Monteiro et al., 2021; Tariq & Diana, 2022). This study offered empirical evidence demonstrating how employees' perceptions of these HR practices influenced their self-efficacy, contributing to a more comprehensive understanding of how these practices affected performance. By highlighting the roles of HR practices in enhancing self-efficacy, the study provided valuable insights for PHEIs aiming to improve employee performance by fostering an environment that strengthened employees' confidence in their abilities.

Third, the study addressed the gaps in the limited research on the relationship between self-efficacy and employee performance, particularly within the context of PHEIs in Sarawak. While self-efficacy had been recognized as a key factor in employee motivation and performance (Bandura, 1997), there had been insufficient exploration of this relationship in the specific setting of PHEIs. This study contributed to closing this research gap by providing empirical evidence on how self-efficacy directly influenced employee performance in these institutions. By demonstrating that employees with higher self-efficacy were more effective in planning tasks, confidently overcoming challenges, and achieving superior outcomes, the study highlighted the critical role of self-efficacy in driving

performance (Al-Ajarmeh, 2022; Basyir, 2019; Hadi, 2023; Harini et al., 2019). This expanded understanding was essential for PHEIs in Sarawak, as it offered insights into strategies for enhancing employee self-efficacy, which, in turn, could lead to improved overall performance.

Fourth, assess the mediating role of self-efficacy between HR practices and employee performance. Thus, explaining the mechanism through which HR practices can influence employee performance. By demonstrating that self-efficacy is a crucial mediator, the study explains how practices such as training and development, job rotation, career planning, and job involvement translate into improved employee performance. Previous research has acknowledged the impact of HR practices on skills and motivation but has not fully explored the pathways leading to performance outcomes (Abdul Rahim Zumrah et al., 2022; Al-Kazlah & Badkook, 2022; Khuong et al., 2020). This study fills that gap by showing that when organizations invest in effective HR practices, employees' self-efficacy increases, thereby boosting their confidence and performance. This contribution extends existing HR models by incorporating self-efficacy as a mediator, offering a more comprehensive understanding of how HR practices can be strategically designed to enhance both employee capabilities and psychological empowerment, ultimately leading to better performance.

The study relied on Social Exchange Theory (SET) and the Ability, Motivation, and Opportunity (AMO) theory to explain the HR practices affecting employee performance, with the mediating role of self-efficacy. SET theory (Blau, 1964) was found to be a compelling framework for understanding the impact of HR practices on employee performance (Kilroy et al., 2022; Kim & Qu, 2020; Pazetto et al., 2023; Saputra et al., 2023;

Xu & Zhang, 2022). Appelbaum et al. (2001) posited that self-efficacy beliefs influenced employee performance. By combining these theories, the study provided an understanding of how HR practices influenced employee performance through the mediating role of self-efficacy.

The present study integrated two theoretical approaches, namely SET and AMO theory. The study extended the research concerning HR practices—specifically training and development, job rotation, career planning, and job involvement—and employee performance by incorporating SET theory. Additionally, the study furthered research on self-efficacy as a mediator in the relationship between HR practices and employee performance by integrating AMO theory. In doing so, it contributed to theoretical development by combining SET and AMO theory within the context of PHEIs in Sarawak.

This study addressed a significant theoretical gap by examining the mediating role of self-efficacy in the relationship between HR practices and employee performance within PHEIs in Sarawak. While existing research had established direct links between HR practices and employee performance, the mechanisms underlying this relationship remained underexplored, particularly concerning self-efficacy as a mediator. By integrating SET and the AMO framework, this study provided a comprehensive understanding of how HR practices could enhance employee performance through the enhancement of self-efficacy. This approach not only enriched the theoretical discourse on HR and employee performance but also offered practical insights for PHEIs aiming to improve organizational outcomes through targeted HR strategies that bolstered employee self-belief and efficacy.

1.6.2 Practical Significance

This study had practical significance for policymakers, management, and practitioners. From a practical perspective, it was vital for higher education institutions and beyond, as it provided actionable strategies for enhancing employee performance. Improved performance could lead to greater efficiency and effectiveness in delivering services to students and other stakeholders, which became increasingly important as higher education institutions faced growing demands for accountability and high performance.

First, the study's findings offered valuable insights and guidelines to policymakers, management, and practitioners for developing HR practices and policies that effectively enhanced employee performance in higher education. Recent research had emphasized the importance of customized HR practices in driving organizational success, particularly within educational settings. By implementing these tailored practices, higher education institutions could more effectively motivate their staff and boost overall performance.

Second, by focusing on improving employee performance, the study contributed to the overall effectiveness of educational organizations. Since employee performance is a key driver of organizational success, the study provided empirical evidence on how HR practices, as foundational elements of employee performance, could address issues of underperformance through mechanisms like self-efficacy. This was especially critical in maintaining academic excellence and protecting institutional reputation in an increasingly competitive educational environment.

Third, the study's practical significance extended to enhancing staff retention and reducing turnover rates in higher education institutions. By identifying effective HR practices that directly influenced employee performance, the research provided insights into

creating a more engaging and supportive work environment. Higher employee performance, coupled with improved job satisfaction through well-structured HR practices such as training and development, career planning, and job involvement, contributed to higher retention rates. Educational institutions often faced high turnover rates, which could disrupt the continuity of academic services and increase operational costs. The findings of this study suggested that by fostering a work culture that promotes skill development and self-efficacy, institutions could retain their most valuable assets—their employees—thus ensuring long-term stability and success.

Fourth, the study also had practical significance for leadership development within higher education institutions. By highlighting the role of self-efficacy as a mediator between HR practices and employee performance, the research emphasized the importance of developing leadership skills that could further strengthen institutional performance. Leaders in higher education needed to be equipped not only with technical knowledge but also with the ability to inspire and enhance self-efficacy among their teams. The insights provided by this study offered educational leaders a clear understanding of how to implement HR strategies that empowered employees to take on leadership roles, thereby fostering a culture of shared responsibility and continuous improvement within the organization. This approach to leadership development was essential in preparing institutions to meet evolving challenges in the higher education landscape.

Based on the above discussion, this research was both significant and justifiable. The findings of this study contributed not only to the body of knowledge and literature on HR practices in higher education but also provided practical benefits to private and public educational institutions.

1.7 Scope of the Research

The present study aimed to investigate the direct relationship between HR practices and employee performance, as well as the mediating role of self-efficacy in this relationship. In this study, four HR practices—training and development, job rotation, career planning, and job involvement—were tested in relation to the composite of employee performance. Additionally, the study examined self-efficacy as a mediator in the relationship between HR practices and employee performance.

This study targeted academic and non-academic staff from 27 PHEIs in Sarawak, as registered in May 2024 (refer to Table 1.5). The research aimed to assess the relationship between HR practices and employee performance, with self-efficacy serving as a mediator. By focusing on the factors that contributed to high-performing staff, the study sought to provide actionable insights for policymakers, institutions, and development agencies. These insights were intended to strengthen the contribution of PHEIs to economic development in the region.

In this study, a purposive sampling method was employed to select both academic and non-academic staff working in Sarawak's Private Higher Education Institutions (PHEIs), recognizing that both groups are integral to delivering quality education and services to students. Focusing exclusively on Sarawak is pertinent due to the state's initiative to provide free tertiary education by 2026, primarily benefiting state-owned institutions. Consequently, it is essential to assess the performance and sustainability of the 27 PHEIs in Sarawak, especially those not under Yayasan Sarawak sponsorship, to ensure they remain competitive and viable in this evolving educational landscape.

Table 1.5: Number of Academic and Non-Academic Staff

No.	Name of PHEIs	Status	Number of staff
1	University of Technology Sarawak (UTS)	University	356
2	UCSI University, Sarawak Campus	University	60
3	Swinburne University of Technology Sarawak Campus	University	376
4	Curtin University, Malaysia	University	172
5	i-CATS University College	University College	136
6	Sarawak Maritime Academy	College	Not available
7	Methodist Pilley Institute	College	8
8	LimKokWing Institute of Creative Technology, Sarawak Branch	College	Not available
9	Regal City College	College	Not available
10	Riam Institute of Technology	College	Not available
11	Fajar International College	College	Not available
12	FAME International College	College	30
13	i-CATS Miri Branch	College	Not available
14	Cyberjaya College Kuching	College	36
15	Cosmopoint College Kuching	College	Not available
16	Executive College	College	15
17	IBS College	College	Not available
18	I-Systems College Kuching	College	Not available
19	Kolej Laila Taib	College	27
20	MSU College Sarawak	College	Not available
21	SATT College	College	Not available
22	Sedamai College	College	Not available
23	SEGi College Sarawak	College	Not available
24	SIDMA College Sarawak	College	14
25	Sunway College Kuching	College	Not available
26	Technology College Sarawak	College	Not available
27	Yahos College	College	Not available

Note: Jabatan Pendidikan Tinggi (2024)

1.8 Operational Definitions

This part will discuss the definition for all variables which will be commonly used throughout this research. There are six (6) variables in this research hence six (6) definitions are given as below.

1.8.1 Employee Performance

Employee performance is the measure of how effectively an employee fulfills their job duties and responsibilities, including the quality, efficiency, and effectiveness of their work (Nusraningrum et al., 2024). It also reflects their ability to meet goals and deadlines, contributing to the organization's success. High employee performance typically results in increased productivity, better organizational outcomes, and personal career advancement. It encompasses the achievement of individual goals aligned with management expectations, within set timeframes, while adapting to changing environments and supporting the organization's core functions.

1.8.2 Training and Development

Training and development refer to the continuous efforts by an organization to improve the skills, knowledge, and competencies of its employees (Jha, 2020). Training focuses on enhancing specific skills needed for current job roles, while development aims at broader growth, preparing employees for future roles and career advancement. This process helps employees perform their tasks more effectively, stay updated with industry trends, and achieve their professional goals.

1.8.3 Job Rotation

Job rotation is a practice where employees are periodically moved between different tasks or roles within an organization. This helps them develop a broader skill set, gain a better understanding of various aspects of the company, and stay motivated by reducing monotony (Mlekus & Maier, 2021). Job rotation can enhance employee flexibility, reduce burnout, and improve overall job satisfaction.

1.8.4 Career Planning

Career planning is the process of setting career goals and identifying the steps and actions needed to achieve them. It involves assessing employee skills, interests, and values, exploring potential career paths, and creating a strategic plan to reach your desired career objectives (Kostadinova-Maslarova, 2019). Effective career planning helps individuals make informed decisions about their professional development and progression.

1.8.5 Job Involvement

Job involvement is the extent to which a person identifies with their job, feels a strong connection to it, and considers their performance important to their self-esteem (Culibrk et al., 2018). It reflects how committed and enthusiastic they are about their work. High job involvement typically results in higher job satisfaction, better performance, and lower turnover rates.

1.8.6 Self-Efficacy

Self-efficacy is the belief in one's ability to successfully accomplish tasks and achieve goals. It influences how people approach challenges, their level of effort, and their resilience in the face of difficulties (Judge et al., 2007). High self-efficacy leads to greater motivation and persistence, enhancing overall performance and personal growth.

1.9 Organization of the Dissertation

This section outlined and provided an overview of the organization of the dissertation. The research comprised five (5) chapters. Chapter One served as the Introduction, offering a general introduction and overview of the research concerning employee performance in relation to human resource management practices and self-

efficacy. This chapter included the problem statement, research questions, and research objectives. Additionally, it addressed the significance of the research and concluded with the operational definitions for the key terms: human resource management practices, self-efficacy, and employee performance.

Chapter Two was the literature review. This chapter examined the relevant literature pertaining to HR practices that affect employee performance and self-efficacy in the workplace. It also provided the foundation and support for the research. Furthermore, it reviewed the two underpinning theories associated with the conceptual framework. The chapter also included the formation of the conceptual framework and the development of hypotheses for the study.

Chapter Three detailed the research methodology and how the research was conducted. It provided the justification for the quantitative approach used in the study. The chapter also described the research design, covering the research instrument, data collection methods, and the data analysis tools and techniques that were adopted in the research.

Chapter Four focused on data analysis and the presentation of the analysis results. The primary objective of this chapter was to analyze the data collected through the survey and report the findings. A statistical approach was used to test the hypotheses and examine the mediation impact of self-efficacy on employee performance.

Chapter Five presented the discussion and conclusion of this research. The findings from the research were compared to the existing literature, and conclusions were drawn based on the outcomes of the hypotheses testing. The chapter concluded with the implications of the research, its limitations, and suggestions for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Chapter Two of this study provided a comprehensive review of the literature relevant to the research. This chapter specifically explored the concept of employee performance along with its various dimensions, as well as HR practices and self-efficacy. The chapter examined the relationship between the independent and dependent variables through a review of empirical studies on HR practices and employee performance. Additionally, the chapter explored the potential mediating effect of self-efficacy by synthesizing empirical studies on HR practices and employee performance. Empirical studies examining the link between self-efficacy and employee performance were also systematically discussed. Furthermore, the chapter reviewed the underpinning theories that informed the research, providing a theoretical foundation for understanding the relationships among the constructs. The chapter also included the development of the conceptual framework, which visually represented these relationships, and the formulation of hypotheses based on the literature and theories reviewed.

2.2 Concept of Employee Performance

Employee performance was a critical factor for organizational success (Yamin, 2020). Research consistently demonstrated a significant correlation between employee performance and overall organizational performance, emphasizing the vital role that employee performance played in the success and growth of any business.

From an economic perspective, performance was often limited to the organization's ability to manage costs and outcomes with efficiency and effectiveness (Ghahremanloo et al., 2019; Ng Corrales et al., 2022). Several researchers discussed the need to distinguish between the action and outcome aspects of performance when considering it, rather than focusing solely on economic metrics (Campbell, 1990; Kanfer, 1990; Campbell et al., 1993; Roe, 1999; Sonnentag & Frese, 2002). Most researchers on performance (Edwards, 2001; Rodrigues & Rebelo, 2009; Patnaik, 2020; Pattnaik & Pattnaik, 2020) believed that employee performance was multidimensional. In this study, the researcher combined the three identified dimensions of employee job performance—task performance, contextual performance, and adaptive performance—as outlined by Koopmans et al. (2011) to examine their relationship with HR practices and self-efficacy.

Examining both direct and indirect relationships between exogenous variables (HR practices) and endogenous variables (employee performance) is essential for a comprehensive understanding of how these variables influence each other. By analyzing both pathways, researchers can identify not only the existence of a relationship but also the underlying processes that drive these effects, thereby offering deeper insights into causal pathways and informing more effective interventions.

2.2.1 Dimensions of Employee Performance

The evaluation of employee performance was a crucial aspect of organizational management and human resource practices. A comprehensive understanding of performance dimensions enabled organizations to effectively manage, assess, and develop their workforce. This section provided a thorough explanation of each of the three main aspects

of employee performance: task performance, contextual performance, and adaptive performance.

2.2.1.1 Task Performance

Task performance was the efficiency with the way employees carried out tasks that directly contributed to the technical core of the organization. This dimension encompassed the fulfillment of job-specific responsibilities and the execution of tasks central to the job role. Campbell (1990) conceptualized task performance as the proficiency with which individuals performed their central job duties. This included skills, cooperation and judgment to complete tasks efficiently (Koopmans et al., 2011; Maripaz et al., 2013).

Task performance was fundamentally linked to organizational productivity and operational success. High levels of task performance indicated that employees were not only proficient in their roles but also contributed significantly to the organization's primary objectives. This direct impact on productivity made task performance a critical focus of performance appraisals. Studies, such as those by Christian et al. (2011), emphasized the importance of task performance in achieving organizational goals. Effective task performance required a combination of technical competence, problem-solving abilities, and a thorough understanding of job-specific requirements. Campbell (1990) and Koopmans et al. (2011) highlighted three essential aspects of task performance, including of job knowledge, work quality, and work quantity. This dimension emphasized the necessity for employees to meet established standards and expectations, thereby ensuring operational efficiency and contributing to the organization's bottom line.

2.2.1.2 Contextual Performance

Contextual performance involved behaviors that supported the organizational, social, and psychological environment, thereby enhancing the overall functioning of the organization. Unlike task performance, contextual performance was not confined to specific job roles but contributed to a positive organizational climate (Le Sante et al., 2021; Marinova et al., 2018). Borman and Motowidlo (1997) and Weiner et al. (2013) described contextual performance as actions that sustained and improved the social and psychological context in which technical tasks were carried out. These behaviors included helping colleagues, adhering to organizational norms, demonstrating initiative, and supporting organizational objectives (Sante et al., 2021).

Contextual performance referred to behaviors that enhanced organizational effectiveness by positively influencing the psychological, social, and organizational context of work (Motowidlo, 2003). It encompassed supporting others, fostering unity of purpose, demonstrating tenacity, and maintaining a strong desire to succeed (Schiemann, 2009). Employees who excelled in contextual performance engaged in activities that promoted teamwork, reduced conflicts, and cultivated a supportive work environment. These behaviors were critical for maintaining a cohesive and productive workplace, even though they might not have been explicitly rewarded or recognized in formal job descriptions.

Contextual performance, while not directly related to core tasks, enhanced organizational effectiveness by promoting cooperation and mutual support, reflecting employees' willingness to exceed basic job requirements for long-term success (Dongrey & Rokade, 2022). The study by Gustari and Widodo (2023) demonstrated that interpersonal skills significantly influenced both creativity and contextual performance. Additionally, creativity had a significant impact on contextual performance, and the effect of interpersonal

skills on contextual performance was significantly mediated by creativity. The integration of contextual performance into performance management systems was essential for recognizing and encouraging behaviors that underpinned a positive organizational culture.

2.2.1.3 Adaptive Performance

Adaptive performance, as an aspect of overall employee performance, pertained to an individual's ability to adjust their behavior to meet the requirements of a new environment. Pulakos et al. (2000) defined adaptive performance as the capacity to modify behavior and attitudes to meet evolving job requirements and environmental changes. Adaptive performance included problem-solving in novel situations, learning new skills, and effectively coping with stress and uncertainty. This concept was particularly relevant for companies dealing with complex and volatile business conditions (Charbonnier-Voirin & Roussel, 2012).

The necessity of adaptive performance escalated with the rapid pace of technological advancements and market shifts. Organizations operated in environments characterized by constant change and unpredictability. According to Park and Park (2019), an employee's adaptability could result in enhanced job performance and career success. This dimension was increasingly important in the modern, dynamic organizational environment.

The importance of adaptive performance was highlighted by its potential to yield favorable outcomes for organizations, including enhancing task performance and overall organizational productivity (Park & Park, 2019; Shoss et al., 2012). It contributed to organizational resilience and competitiveness, enabling companies to navigate complex and volatile business landscapes successfully. By fostering adaptive performance, organizations ensured that their workforce remained flexible and capable of meeting future demands.

In this study, employee performance was examined as a comprehensive construct, encompassing three key dimensions: task performance, contextual performance, and adaptive performance. By considering these dimensions together, the research aimed to provide a holistic understanding of employee performance.

2.3 Concept of Human Resource Management

Human Resource Management (HR) was a strategic and systematic approach to managing an organization's workforce, aimed at improving individual and organizational performance (Armstrong & Taylor, 2020). In higher education institutions, HR played a crucial role in ensuring that both academic and administrative staff were effectively managed to achieve educational excellence and research output.

Past research demonstrated that the presence of an HR department and complementary human resource management practices were associated with an increased likelihood of the presence of employee performance management systems in academic units (Decramer et al., 2012). HR in this sector involved not only traditional administrative tasks but also strategic initiatives to foster an environment conducive to high performance and innovation among employees.

The impact of HR on employee performance in higher education institutions was profound, influencing factors such as faculty engagement, job satisfaction, and productivity (Brenya et al., 2018; Kasule et al., 2021). While effective HR practices could enhance these aspects, a significant research gap remained in identifying the specific HR strategies that were most effective in higher education settings. Existing literature often focused on general HR practices without delving into the unique challenges and needs of higher education institutions. Therefore, further empirical research was needed to tailor HR approaches to

optimize employee performance in this sector, addressing this critical gap in the current body of knowledge (Elrayah & Semlali, 2023; Huang et al., 2022; Runhaar, 2016).

2.4 Human Resource Management Practices

Human resource management (HR) practices encompassed a wide range of activities, including employee relations, training and development, recruitment and selection, compensation management and performance appraisal. According to Anghel and Almasan (2024), effective HR practices were crucial for creating a motivated and competent workforce, which in turn contributed to organizational success.

Higher education institutions (HEIs) faced unique challenges in managing their human resources due to their dual mission of teaching and research. Effective HR practices were essential for enhancing the performance of academic and administrative staff, which directly impacted the institution's overall effectiveness (Sušanj et al., 2020). Research showed that HR practices such as training and development (Alam, 2022; Halid et al., 2020), job rotation (Khan et al., 2023; Sholikhah et al., 2023), career planning (Keltu, 2024), job involvement (Al-refaei et al., 2023; Rana, 2022), and self-efficacy (Osman, 2020; Zaidi, 2022) could significantly improve employee performance in HEIs.

However, the relationship between HR practices and employee performance in HEIs was complex and multifaceted. Furthermore, the effectiveness of HR practices in HEIs varied depending on the detailed context and characteristics of the institution.

2.5 Factors Affecting Employee Performance

In the global context, various HR practices have been identified as key factors influencing employee performance. These practices not only enhance individual competencies but also contribute to organizational effectiveness.

Training and development initiatives are fundamental in equipping employees with the necessary skills and knowledge to perform their tasks efficiently. Service sector organizations demonstrated that comprehensive training programmes significantly boost employee involvement and performance (Hosen et al., 2024; Pradhan & Shrestha, 2021). The researchers recommended that organizations allocate budgets for continuous employee training and development to sustain high performance levels.

Job rotation, which involves periodically moving employees across different roles or departments, serves as both a training mechanism and a strategy to enhance job satisfaction. Past studies revealed a significant positive relationship between job rotation and employee performance, as well as increased employee commitment (Kampkotter et al., 2016; Yusof et al., 2023). The study suggests that well-planned job rotation can lead to a more versatile and committed workforce.

Career planning is integral to employee development, assisting individuals in identifying the skills required for future job demands. A study highlighted that effective career planning not only aligns employee aspirations with organizational goals but also enhances job satisfaction and performance (Nava-Macali et al., 2019; Setyawati et al., 2022). The research emphasized that career planning should be a core component of employee training and development programmes.

Job involvement refers to the degree to which an individual identifies psychologically with their job and considers their perceived performance level important to self-worth. Past studies showed high job involvement has been linked to increased job satisfaction, organizational commitment, and overall performance (Matagi et al., 2022; Mirda & Prasetyo, 2022). While specific global studies on job involvement were not identified in the provided sources, the concept is widely recognized in HR literature as a critical factor influencing employee performance.

Employee performance had been researched extensively for many years and was considered the most significant factor in an organization's success. Effectiveness and efficiency were crucial in shaping superior company service quality, directly influencing individual employee performance and overall company performance. Previous research validated this relationship, emphasizing the considerable influence of employee performance on organizational success (Dreyfus et al., 2020; Sikul et al., 2015).

2.5.1 Training and Development

To increase employees' abilities, competencies, and knowledge, training and development were essential parts of human resource management. Training was defined as a structured methodology aimed at augmenting individuals' knowledge, skills, and attitudes, with the objective of enhancing personal, team, and organizational effectiveness. While, development was characterized as a deliberate and structured effort aimed at broadening individuals' knowledge or skills, either for personal growth or to prepare them for future job roles and responsibilities (Aguinis & Kraiger, 2009). These processes were intended to enhance employee performance, foster personal growth, and align individual capabilities with organizational goals (Saul et al., 2023). Effective training and development programs

led to increased higher productivity, and reduced employee turnover (Aktar, 2023; Obasi & Wokoma, 2018).

PHEIs faced unique challenges in maintaining competitive advantage and ensuring high-quality education. Training and development programs in PHEIs were crucial for enhancing the capabilities of both academic and administrative staff. These institutions often relied on training to keep faculty updated with the latest pedagogical techniques, research methodologies, and industry trends (Okolie et al., 2020). Additionally, development programs helped staff acquire new skills that were essential for their career advancement and the institution's success. PHEIs that invested in robust training and development programs created a more dynamic and innovative workforce, ultimately leading to improved student outcomes and enhanced institutional reputation (Walker & Derbyshire, 2020).

Numerous studies have established a significant positive relationship between training and development and employee performance in higher education institutions. Sifawa and Mukasa (2024) found that continuous professional development programs significantly enhanced the teaching effectiveness and research productivity of academic staff. Similarly, a study conducted by Al-refaei (2021) demonstrated that training and development initiatives resulted in improved job performance and greater organizational commitment among university employees. These findings indicated that well-designed training and development programs could lead to substantial improvements in employee performance, which is critical for the success of higher education institutions.

Contrarily, some studies reported an insignificant relationship between training and development and employee performance in higher education. Research by Chemutai and Khalili (2022) found that while training programs were prevalent in higher education

institutions, their impact on employee performance was insignificant. Furthermore, a study conducted by Garaika (2020) found an insignificant positive effect of training on performance in higher education institutions in Palembang, Indonesia. The study suggested that these institutions should provide clear career development pathways for lecturers through activities such as job rotation, selection, placement, education, and training.

2.5.2 Job Rotation

Job rotation was a strategic HR practice involving the periodic movement of employees across various roles or departments within an organization. This practice aimed to develop a versatile workforce by enhancing employees' skills, knowledge, and experience (Al-Zoubi et al., 2022). By exposing employees to different tasks and responsibilities, job rotation contributed to reducing job monotony, preventing burnout, and fostering a deeper understanding of the organization’s operations. The relationship between job rotation and employee performance was based on the theory that diverse experiences could lead to improved motivation, and overall performance (Suleman et al., 2022). Employees who were regularly rotated tended to be more adaptable, innovative, and proficient in problem-solving, which positively influenced organizational performance (Gubicza & Remsei, 2024).

In PHEIs, job rotation was particularly beneficial due to the dynamic and multifaceted nature of the educational environment. These institutions often required staff to possess a broad range of skills and competencies to effectively manage academic programs, administrative functions, and student services. Job rotation in this context led to a more agile and responsive workforce, capable of addressing the diverse and evolving needs of the institution. Through rotation in different roles, employees gained a comprehensive understanding of the institution's operations, which enhanced their performance in their

primary roles. Additionally, this practice contributed to succession planning and leadership development, ensuring that critical knowledge and skills were distributed across the organization, thereby reducing the risk of operational disruptions due to staff turnover (Abd Rashid et al., 2022; Gabriel et al., 2020).

Several studies demonstrated a significant positive relationship between job rotation and employee performance in higher education settings. Yakubu and Majeed (2018) found that employees who participated in job rotation programs reported higher levels of performance outcomes. The study emphasized that exposure to various roles enabled employees to develop a diverse skill set, leading to enhanced problem-solving abilities and creativity. Furthermore, Suleman et al. (2022) indicated that job rotation contributes to employees' understanding of different aspects of the institution, better equipping them to work together toward common goals, ultimately enhancing institutional performance.

Conversely, some research indicated that job rotation may not significantly impact employee performance in higher education. Salih and Al.Ibed (2017) argued that while job rotation might increase job performance by providing variety and reducing monotony, it did not necessarily lead to measurable improvements in performance. Their study suggested that the benefits of job rotation might be more psychological, offering employees a sense of career development and engagement without directly enhancing their job performance. Similarly, Mlekus and Maier (2021) explored the impact of job and task rotation on various workplace outcomes. Their research indicated that job and task rotation were significantly linked to several positive outcomes, including increased organizational commitment, greater career success, improved labor flexibility, better psychological health, reduced stress levels,

and higher performance. However, the study concluded that job and task rotation did not have a significant impact on individual performance.

2.5.3 Career Planning

Career planning was a systematic process through which individuals set career goals and identified the means to achieve them. It involved self-assessment, exploration of career options, goal setting, and developing strategies to reach these goals. This process was critical in guiding employees through their career paths, helping them align their personal aspirations with organizational objectives. Career planning was fundamentally linked to employee performance, as it provided a clear roadmap for employees to follow, thereby enhancing their motivation and engagement (Widi & Kusuma, 2023). Employees with well-defined career plans were more likely to exhibit higher levels of performance because they were focused, committed, and equipped with the necessary skills and knowledge to achieve their goals (Shastri, 2023).

Career planning was vital in PHEIs as it significantly influenced the performance of both academic and administrative staff. These institutions often faced unique challenges, such as the need to attract and retain talented staff in a competitive environment. Effective career planning addressed these challenges by fostering a supportive environment where employees felt valued and perceived clear pathways for their professional growth (Arhipova & Kokina, 2022). This alignment between personal career aspirations and institutional goals led to reduced turnover rates, and improved overall performance. PHEIs that invested in robust career planning programs were likely to observe a direct positive impact on their employees' performance, thereby contributing to the institution's success (Nava-Macali et al., 2019; Tabiu et al., 2016).

Past studies demonstrated a significant relationship between career planning and employee performance in higher education. Studies indicated that institutions implementing comprehensive career planning programs experienced higher levels of employee engagement and performance. Litynska's (2023) study found that career planning initiatives in higher education significantly enhanced employees' commitment to their roles and improved their performance metrics. Similarly, Van der Heijden et al. (2022) found that university staff who were more interested in and focused on their career development and progression scored higher on their reported employability. Research by Suparjo and Nurchayati (2022) indicated a strong relationship between career development and the quality of employee job performance. Their study concluded that organizations aiming to improve employee performance should establish and reinforce career mentoring programs to facilitate skill acquisition. It further recommended encouraging career counseling activities to create a sustainable framework for employees to acquire essential operational skills, thereby enhancing their job performance. These findings suggested that career planning was a crucial factor in optimizing employee performance in higher education institutions.

However, not all research supported the notion that career planning had a significant impact on employee performance in higher education. Some studies reported insignificant or mixed results. Past studies found no substantial correlation between career planning and employee performance, indicating that career planning had insignificant effects on employee performance (Hatuwe & Muspiha, 2023; ShahidMahmood et al., 2022). These studies also revealed that performance appraisal, rather than career planning, motivated employees to be more professional and responsible, thereby enhancing employee performance. Similarly, Husainah et al. (2024) argued that while career planning might be beneficial for personal

development, its direct impact on performance was not always evident. These contradictory findings suggested that the effectiveness of career planning may have depended on various factors, such as organizational culture, implementation strategies, and individual differences among employees.

2.5.4 Job Involvement

Job involvement generally referred to the degree of an employee's engagement with their work. The level of job involvement was influenced by an individual's needs, values, work ethics, organizational environment, and the nature of the job (Gopinath et al., 2020). It reflected the extent to which employees were cognitively preoccupied with, engaged in, and concerned about their work. High job involvement implied a strong alignment between an employee’s job and their self-concept, leading to greater effort and persistence in job-related activities. Job involvement was positively correlated with employee performance, as involved employees were more likely to exhibit higher levels of productivity (Septiadi et al., 2017; Suparna & Noor, 2021). These employees tended to invest more time and energy into their tasks, resulting in better performance outcomes and contributions to organizational goals.

Within PHEIs, the degree of job involvement was essential in shaping employee performance. These institutions relied heavily on the commitment and engagement of their academic and administrative staff to deliver high-quality education and services. Faculty members with high job involvement were likely to be more dedicated to their teaching and research responsibilities, leading to improved student outcomes and an enhanced institutional reputation (Mirzaei-Alavijeh et al., 2020). Similarly, administrative staff with strong job involvement contributed to efficient management and support services, thereby

enhancing the overall operational effectiveness of the institution. The competitive environment of private higher education necessitated a high level of performance from all employees, making job involvement a key factor in achieving institutional success (Ahmad et al., 2021). Thus, fostering job involvement through supportive leadership, professional development opportunities, and a positive work environment significantly enhanced employee performance in these settings (Prasetyo et al., 2021).

Several studies demonstrated a significant relationship between job involvement and employee performance in higher education settings. Gopinath (2020) found that job involvement was positively correlated with the teaching performance and organizational performance of university faculty members. Organizational commitment, which signified the bond between employees and the organization, contributed to improved performance and lower turnover rates. The study by Bastian and Widodo (2022) revealed that job involvement among academic staff was a strong predictor of innovative work behaviors, which were essential for advancing educational practices and research. Additionally, job involvement was found to mediate the impact of innovative behavior on lecturers' task performance. These studies indicated that increased job involvement resulted in improved employee performance, as engaged employees were more motivated, committed, and inclined to exceed their basic job responsibilities to attain excellence.

In contrast, various studies indicated that the relationship between job involvement and employee performance in higher education was insignificant. Previous research found no significant correlation between job involvement and staff performance (Hakim et al., 2021; Wardiansyah et al., 2024). Empirical evidence from these studies suggested that job involvement did not enhance job performance within the organization. This lack of impact

was attributed to job involvement not prioritizing emotional engagement. As a result, job involvement did not improve employees' ability to collaborate effectively. Additionally, for job involvement to enhance performance, the organization needed to prioritize advancement and development. Therefore, employee participation in work activities did not necessarily lead to better job performance. These findings highlighted the complexity of the relationship between job involvement and performance, suggesting that it might be influenced by various contextual and individual factors that needed to be considered.

2.5.5 Self-Efficacy

Self-efficacy, a concept introduced by Albert Bandura, referred to an individual's belief in their ability to successfully execute the behaviors required to achieve specific performance attainments (Bhati & Sethy, 2022). It functioned as a critical psychological mediator that influenced motivation, learning, and performance. Self-efficacy affected how employees approached tasks, set goals, and persisted in the face of challenges. When employees possessed high self-efficacy, they were more likely to take on challenging tasks, persist longer, and demonstrate resilience, leading to enhanced performance (Kumar Pradhan et al., 2020). As a mediator, self-efficacy explained how and why HR practices, such as training and development, job rotation, career planning, or job involvement, impacted employee performance. By boosting employees' confidence in their abilities, organizations could improve overall productivity and performance outcomes (Zamiri et al., 2020).

Within PHEIs, self-efficacy played a crucial role in influencing employee performance. Faculty members and administrative staff in these institutions faced unique challenges, such as high expectations for teaching quality, research productivity, and

administrative efficiency. When employees believed in their capabilities, they were more likely to innovate in their teaching methods, engage in continuous professional development, and contribute effectively to institutional goals (Azmy, 2019). Abun et al. (2021) suggested that enhancing task performance and contextual performance necessitated the development of self-efficacy. Employees with higher self-efficacy, advanced skills, and competencies, coupled with high contextual performance (engaging in extra productive behaviors), were better equipped to perform their tasks effectively, ultimately leading to a reduction in counterproductive behaviors.

Research consistently demonstrated a significant relationship between HR practices and employee performance, with self-efficacy serving as a crucial mediator. HR practices such as training and development, job rotation, career planning, and job involvement were designed to enhance employees' skills and career prospects (Chandra & Lobo, 2024; Hee et al., 2016). These practices boosted employees' self-efficacy by providing them with the necessary tools and experiences to feel competent in their roles (Trang, 2023). Training programs focused on skill development and knowledge enhancement significantly increased employees' self-efficacy, leading to improved job performance (Niati et al., 2021). Similarly, job rotation and career planning initiatives exposed employees to diverse experiences, broadening their competencies and confidence levels. As a result, employees became more motivated, engaged, and capable of delivering high performance (Kavyashree et al., 2022).

While numerous studies have supported the mediating role of self-efficacy in the relationship between HR practices and employee performance, some research has reported an insignificant mediation effect, particularly in the higher education sector (Brooke et al., 2018; Salman et al., 2022). These variations were largely influenced by contextual factors

such as organizational culture, employee characteristics, and the way HR practices were implemented. For self-efficacy to function as an effective mediator, HR practices must be aligned with employees' actual needs and institutional objectives. In cases where training programs lacked relevance or were not effectively designed, their impact on self-efficacy remained weak, limiting their ability to enhance employee performance. Similarly, when job rotation and career planning were seen as bureaucratic processes rather than meaningful development opportunities, employees did not experience the expected boost in self-efficacy, leading to negligible improvements in performance (Gautam & Basnet, 2022). These findings justify the role of self-efficacy as a mediator, emphasizing that its effectiveness depends on the quality and relevance of HR practices. Thus, institutions must ensure that HR practices are strategically designed to enhance employees' self-efficacy, thereby maximizing their impact on performance.

Based on the arguments supporting the connections between HR practices and self-efficacy, as well as between self-efficacy and employee performance, along with evidence of self-efficacy's mediating effect in various contexts, this study considered self-efficacy as a mediating variable in the relationship between four HR practices—training and development, job rotation, career planning, and job involvement—and employee performance.

2.6 Underpinning Theories of the Research

The mediating role of self-efficacy in the relationship between HR practices and employee performance was examined through various theoretical perspectives. As no single theory fully captured the interactions among the independent, mediating, and dependent variables, this study drew on multiple theories to explain the dynamics of HR practices and

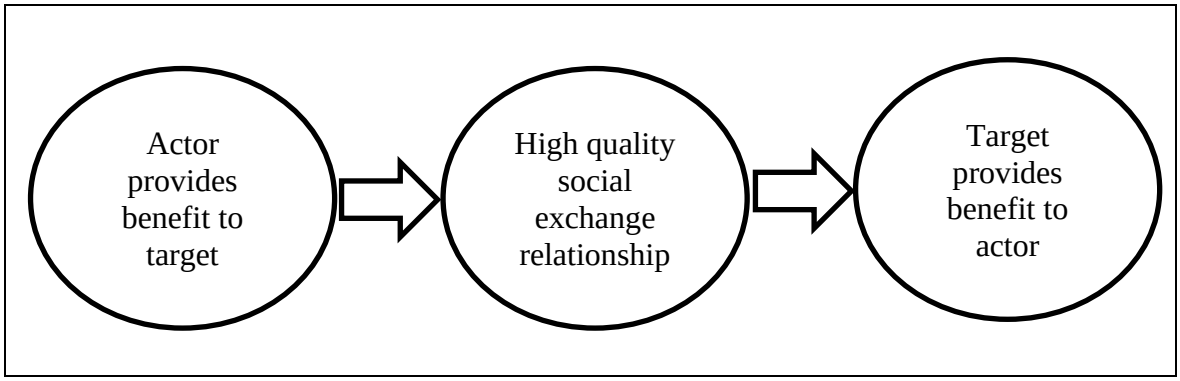
employee performance, with self-efficacy as the mediator. The research incorporated Social Exchange Theory (SET) and the Ability-Motivation-Opportunity (AMO) Theory to provide a comprehensive understanding of these relationships.

2.6.1 Social Exchange Theory (SET)

Social Exchange Theory (SET) remained an essential theoretical framework for examining effective HR practices and their impact on employee performance. Blau (1964) differentiated between social and economic exchanges, arguing that only social exchanges created a sense of obligation and trust. Social Exchange Theory posited that when one individual provided something of value to another, it obligated the recipient to reciprocate. SET, initially conceptualized by George Homans in 1958, revolved around the idea that social behavior resulted from an exchange process where individuals aimed to maximize rewards and minimize costs (Homans, 1958).

According to SET, individuals periodically developed exchange relationships characterized by reciprocal norms through social actors, including other people, groups, and companies (Emerson, 1976). This theory emphasized the importance of reciprocity and mutual benefit in relationships, providing a robust basis for analyzing workplace dynamics. Contemporary applications of SET extended beyond interpersonal interactions to organizational settings, where it explained how employees and employers engaged in reciprocal relationships influenced by perceived fairness and benefits (Cropanzano et al., 2017).

Positive Value



Negative Value

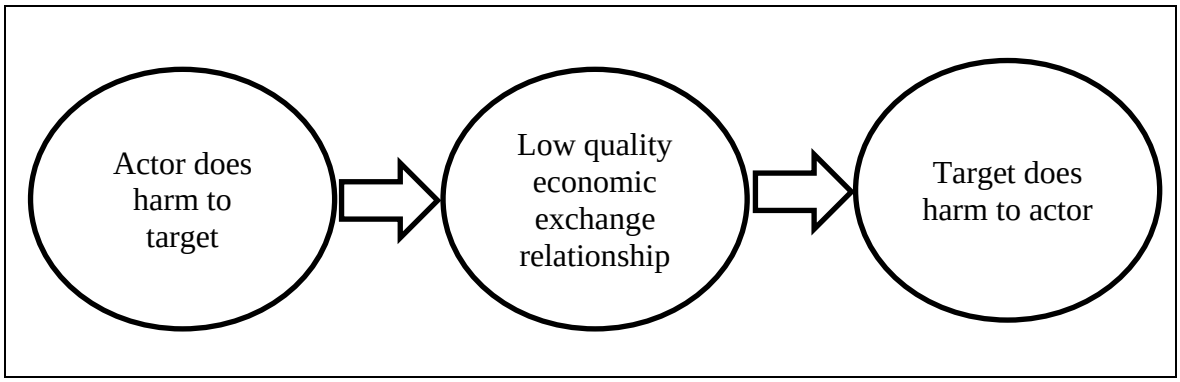


Figure 2.1: Generic Model of Social Exchange

Note: Adapted from Cropanzano et al. (2017)

The Generic Model of Social Exchange, as illustrated in Figure 2.1, highlighted the duality of social interactions, characterized by either positive or negative hedonic values. This model closely aligned with the principles of SET, where the quality of exchanges between individuals or entities led to varying outcomes in relationships. In the context of HR practices, this model highlighted the importance of high-quality exchanges in fostering positive employee outcomes. When organizations provided valuable resources, such as career development opportunities or training programs, they initiated a high-quality social exchange relationship, which typically resulted in employees reciprocating with higher

levels of commitment and performance (Akkermans et al., 2023; Blau, 1964; Cropanzano & Mitchell, 2005; Islami, 2021; Meira & Hancer, 2021; Zhao et al., 2020). This positive exchange was crucial for developing a motivated and productive workforce, as employees who felt valued and supported by their organization were more likely to engage fully in their roles (Akkermans et al., 2019; Meijerink, 2020; Philippaers et al., 2017).

Conversely, the model also demonstrated that low-quality exchanges, where employees perceived a lack of support or fairness from their organization, could lead to negative outcomes. This negative hedonic value, where harm was perceived, could manifest in decreased employee performance, low job satisfaction, and even counterproductive behaviors. In HR practices, if employees felt that they were not receiving adequate support or opportunities, the resulting low-quality economic exchange relationship could lead to disengagement and reduced productivity (Cropanzano et al., 2017; Lee & Jeong, 2017; Uddin et al., 2019). Thus, the SET reinforced the critical role that perceived fairness and the quality of exchange played in determining the overall impact of HR practices on employee performance. By ensuring that HR practices were designed to foster high-quality exchanges, organizations could enhance employee commitment and performance, thereby driving long-term organizational success (Alam et al., 2024; van Esch et al., 2016).

In the context of HR practices such as training and development, SET provided valuable insights into how these initiatives could enhance employee performance. According to SET, when organizations offered resources such as benefits, career advancement opportunities, and training and development programs, employees developed a sense of service obligation and commitment to the organization (Meira & Hancer, 2021; Tsen et al., 2022).

Training and development programs were viewed as organizational investments in employees' skills and capabilities. SET suggests that employees who perceived these opportunities as valuable and supportive were more inclined to reciprocate with increased commitment and performance. Recent research supported this notion, indicating that employees who felt valued and supported through training were more engaged and exhibited higher levels of job satisfaction (Khan & Iqbal, 2020; Zhao et al., 2020). This reciprocal relationship aligned with the core principles of SET, demonstrating that when organizations invested in their employees' development, they fostered a more motivated and productive workforce.

Job rotation and career planning were HR practices that were effectively examined through the framework of SET. Job rotation, which involved moving employees through various positions within the organization, not only mitigated job monotony but also broadened employees' skill sets. Research indicated that job rotation and career planning initiated a social exchange process, compelling individuals to contribute to organizational goals, which in turn led to greater rewards. When employees developed a positive association with their job and organization, it strengthened their connection, consistent with the principles of social exchange theory (Biswas & Bhatnagar, 2013). As a result, individuals responded to organizational support in various ways, leading to increased job satisfaction. When employees perceived a clear pathway for their career development within the organization, they were more likely to reciprocate with loyalty and enhanced performance (Aljehani & Javed, 2021). Thus, SET provided a theoretical foundation for understanding how structured career development initiatives led to mutual benefits for both employees and employers (Nurhayati et al., 2024).

Job involvement, another critical HR practice, was also effectively explained by SET. Job involvement referred to the degree to which employees were engaged in and committed to their work. High levels of job involvement were associated with increased job performance and organizational citizenship behaviors. SET proposed that when employees felt involved and integral to their organization's success, they were likely to respond with higher levels of performance and discretionary effort (Meira & Hancer, 2021). This reciprocal dynamic was essential for fostering a high-performance culture, where employees' engagement and dedication were met with organizational support and recognition, thereby enhancing overall productivity and organizational effectiveness.

From the literature review on employee performance conducted for this research, SET theory was adopted by the researcher. The application of Social Exchange Theory (SET) as the foundation for understanding the relationship between HR practices and employee performance received significant support from previous empirical studies (Alfes et al., 2013b; Gould-Williams & Davies, 2005; Saputra et al., 2023; Snape & Redman, 2010).

2.6.2 Ability–Motivation–Opportunity Theory (AMO)

The Ability–Motivation–Opportunity (AMO) theory, initially posited by Appelbaum et al. (2001) and later elaborated by Boxall (2003), became a foundational framework in understanding the mechanisms through which HR practices influenced employee performance. This theory posited that an employee's performance was a function of their ability, motivation, and the opportunities provided to them within the organizational context. Specifically, the AMO framework asserted that employees performed at higher levels when they possessed the requisite skills (ability), were motivated to utilize these skills

(motivation), and were given opportunities to apply their skills effectively (opportunity) (Bos-Nehles et al., 2013).

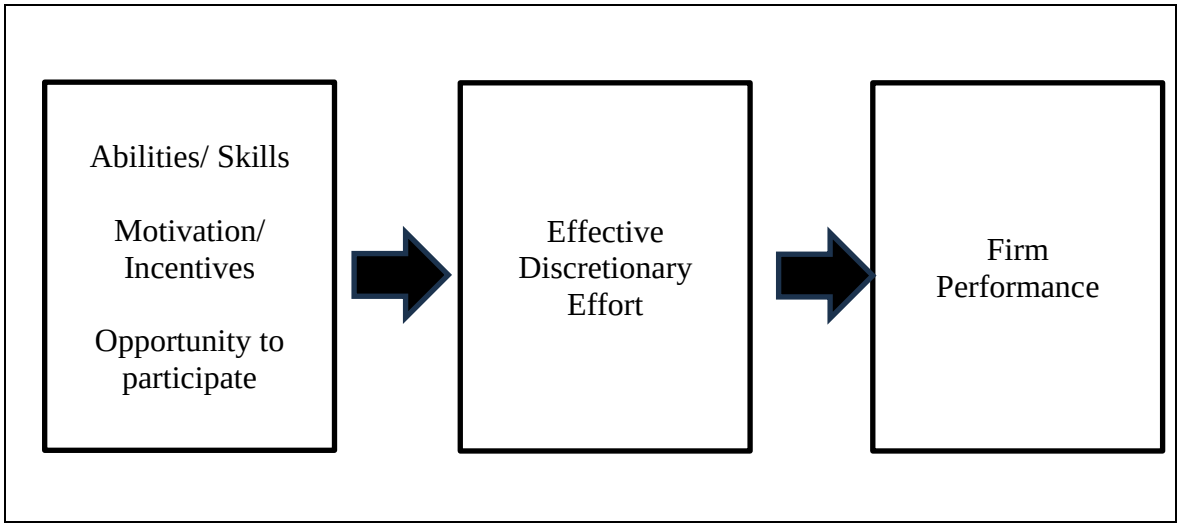


Figure 2.2: AMO Model

Note: Appelbaum et al. (2000)

The AMO model, as depicted in Figure 2.2 by Appelbaum et al. (2000), posited that organizational performance was driven by the optimal combination of employee abilities, motivation, and opportunities. In the context of HR practices within PHEIs, self-efficacy served as a critical mediator between these HR practices and employee performance. Self-efficacy, or the belief in one's ability to succeed in specific situations, closely aligned with the "Abilities/Skills" component of the AMO model. By enhancing self-efficacy through targeted HR practices, institutions fostered greater discretionary effort among employees, thereby linking the AMO model's principles to improved performance outcomes. Specifically, when employees believed in their capabilities, they were more likely to effectively leverage the motivation and opportunities provided by the organization, ultimately contributing to better individual and institutional performance.

The relevance of the AMO theory to HR practices was particularly significant when examining the efficacy of interventions such as training and development, job rotation, career planning, and job involvement on employee performance. Training and development initiatives were designed to enhance the skills and competencies of employees, directly increasing employee engagement and commitment to their organization while addressing the ability component of the AMO framework (Alamri & Al-Duhaim, 2017; Batista & Francisco, 2018). Research by Al-Mottahar and Pangil (2021) and Bos-Nehles et al. (2023) demonstrated that structured training programs improved both task-related skills and overall job performance, thereby validating the AMO theory's emphasis on ability as a critical determinant of performance.

Job rotation, which involved systematically moving employees across various roles within the organization, served to broaden their skill sets and enhance their understanding of the organization's operations. This practice not only built ability but also kept employees engaged and motivated by providing new challenges and learning opportunities. Empirical studies showed that job rotation positively impacted employee motivation and performance, thus supporting the AMO framework's assertion that motivation, coupled with ability, enhanced performance outcomes (Tang et al., 2017).

Career planning and job involvement further reinforced the relevance of AMO theory in HR practices. Career planning initiatives helped employees set and achieve career goals, which increased their engagement and commitment to the organization (ShahidMahmood et al., 2022). By aligning individual career aspirations with organizational objectives, career planning enhanced both motivation and opportunity. Job involvement, reflecting the degree to which employees identified with their jobs and perceived them as central to their lives,

was another crucial factor influenced by HR practices. High levels of job involvement were linked to increased motivation and job performance, supporting the AMO model's assertion that motivated employees perform better (Burić & Moe, 2020; Norzanah et al., 2021).

The AMO theory's applicability across different organizational contexts and its empirical validation in numerous studies (Jiang et al., 2018; Nik Mat et al., 2021; Bos-Nehles et al., 2023) made it a valuable framework for HR research. The three distinct dimensions of AMO represented the factors that enhanced employee ability, motivation, and opportunity to deliver superior performance (Appelbaum et al., 2000; Marin-Garcia & Tomas, 2016). It allowed researchers to separate and analyze the specific contributions of different HR practices to overall performance, thereby offering refined insights that could inform the design and implementation of HR strategies.

Previous researchers extensively validated the AMO theory, highlighting its effectiveness in linking HR practices to performance outcomes. Paauwe and Boselie (2005) emphasized the theory's utility in explaining how HR practices enhanced organizational performance through improved employee capabilities, motivation, and opportunities. Similarly, empirical studies by Ujma and Ingram (2019) and Al-Tit (2020) demonstrated that HR systems designed with the AMO principles in mind led to superior employee performance and organizational outcomes.

Self-efficacy, the belief in one's ability to succeed, enhanced both the motivation and ability components of the AMO theory by driving intrinsic motivation and facilitating skill acquisition, thereby improving employee performance. By acting as a crucial mediator, self-efficacy deepened the understanding of how HR practices influenced performance,

reinforcing the AMO framework's comprehensive approach to capturing employee performance determinants.

In conclusion, the AMO theory provided a robust and integrative framework for studying the impact of HR practices on employee performance. Its emphasis on ability, motivation, and opportunity aligned well with the multifaceted nature of HR interventions, making it a relevant and valuable tool for both researchers and practitioners in the field of human resource management.

2.6.3 Justification of Selected Theories

SET serves as a robust framework for understanding the reciprocal relationships between organizations and employees, particularly in the context of HR practices. By emphasizing mutual obligations and perceived fairness, SET elucidates how positive organizational actions—such as equitable HR practices—can foster employee commitment, motivation, and retention. Gould-Williams and Davies (2005) empirically demonstrated that trust in management, a core component of SET, significantly predicts these positive employee outcomes. Additionally, Cropanzano et al. (2017) provided a critical review of SET, highlighting its applicability in explaining workplace behaviors and the importance of reciprocity in employer-employee relationships. Therefore, employing SET in studying HR practices offers valuable insights into designing strategies that not only meet organizational objectives but also fulfill employee expectations, thereby enhancing overall performance.

In addition, the justification for employing the AMO theory in studying the impact of HR practices on employee performance lay in its comprehensive and integrative nature. Unlike other models that focused solely on skill development or motivational aspects, the AMO framework encapsulated a holistic view of performance determinants. By considering

ability, motivation, and opportunity concurrently, the AMO theory provided a robust explanatory mechanism for understanding how HR practices could be optimized to enhance performance (Kremmydas & Austen, 2020). Appelbaum et al. (2000) and Boxall (2003) argued that effective HR practices should not only focus on improving skills but also on creating a supportive environment that fostered motivation and provided ample opportunities for employees to apply their skills.

2.7 Literature Gap

In the study of HR practices and employee performance, the role of self-efficacy as a mediating factor had not been fully explored, particularly within the context of PHEIs in Sarawak. While a substantial body of literature examined the direct impact of HR practices such as training and development, job rotation, career planning, and job involvement on employee performance, the influence of self-efficacy as a mediator in these relationships remained under-researched. This gap was particularly evident in the context of PHEIs, where the unique challenges faced by academic and administrative staff required a more detailed understanding of the factors that influenced performance.

Training and development were widely recognized as critical components of HR, with numerous studies demonstrating their positive impact on employee performance. However, the existing literature often overlooked the psychological mechanisms that might mediate this relationship. Specifically, while some studies acknowledged the role of self-efficacy in enhancing the effectiveness of training programs, there was limited empirical evidence exploring how self-efficacy mediated the relationship between training and development and employee performance in PHEIs. This gap highlighted the need for further

research examining how training initiatives in PHEIs could be designed not only to improve skills and knowledge but also to boost self-efficacy, thereby enhancing overall performance.

Job rotation was another HR practice associated with positive outcomes such as increased job satisfaction, motivation, and performance. Despite these findings, there was a lack of comprehensive studies investigating how self-efficacy mediated the relationship between job rotation and employee performance. In the context of PHEIs, where employees often needed to adapt to various roles and responsibilities, understanding this mediating role was crucial. The existing literature did not adequately address whether job rotation in PHEIs effectively enhanced self-efficacy and, consequently, employee performance. Therefore, further research was needed to explore this dynamic, particularly focusing on how job rotation could be leveraged to build self-efficacy among academic and administrative staff.

Career planning was a vital HR practice that aligned individual aspirations with organizational goals, yet its impact on employee performance through the lens of self-efficacy had not been thoroughly examined. The literature suggested that career planning could lead to improved employee outcomes, but there was limited research on how self-efficacy might mediate this relationship within the specific setting of PHEIs. Given the competitive nature of higher education, particularly in the private sector, understanding the role of self-efficacy in this context was essential. Further research was needed to determine how career planning initiatives in PHEIs could be structured to enhance self-efficacy and, in turn, improve employee performance.

Job involvement, reflecting the degree to which employees were engaged and committed to their work, was another area where the mediating role of self-efficacy remained underexplored. While job involvement had been linked to positive performance outcomes,

the extent to which this relationship was mediated by self-efficacy was not well understood, particularly in PHEIs. The existing literature did not sufficiently explore how enhancing job involvement could lead to increased self-efficacy and, consequently, better performance. This gap indicated the need for more focused studies examining the interplay between job involvement, self-efficacy, and performance within the unique environment of PHEIs.

Much of the research on HR practices, self-efficacy, and employee performance had been conducted in Western contexts, with limited studies focusing on non-Western settings such as Malaysia. This geographic gap was particularly relevant in the context of PHEIs in Sarawak, where cultural, organizational, and economic factors might have influenced the effectiveness of HR practices and the role of self-efficacy. There was a clear need for more region-specific research that took into account the unique characteristics of PHEIs in Sarawak and other similar contexts to better understand how HR practices could be tailored to enhance self-efficacy and employee performance.

Although substantial evidence supported the positive impact of HR practices on employee performance, the mediating role of self-efficacy remained an underexplored area, particularly in the context of PHEIs in Sarawak. Addressing these gaps through targeted research could provide valuable insights for both academic and practical applications, ultimately leading to more effective HR strategies that enhanced employee performance and organizational success. The next section presented the suggested research model and further explained the connection between the models and constructs examined in this study.

2.8 Conceptual Framework

The theoretical foundation of this study was constructed upon the insights and findings presented in both past and recent relevant literature. The literature revealed a

significant relationship between HR practices and employee performance, with self-efficacy serving as the mediator.

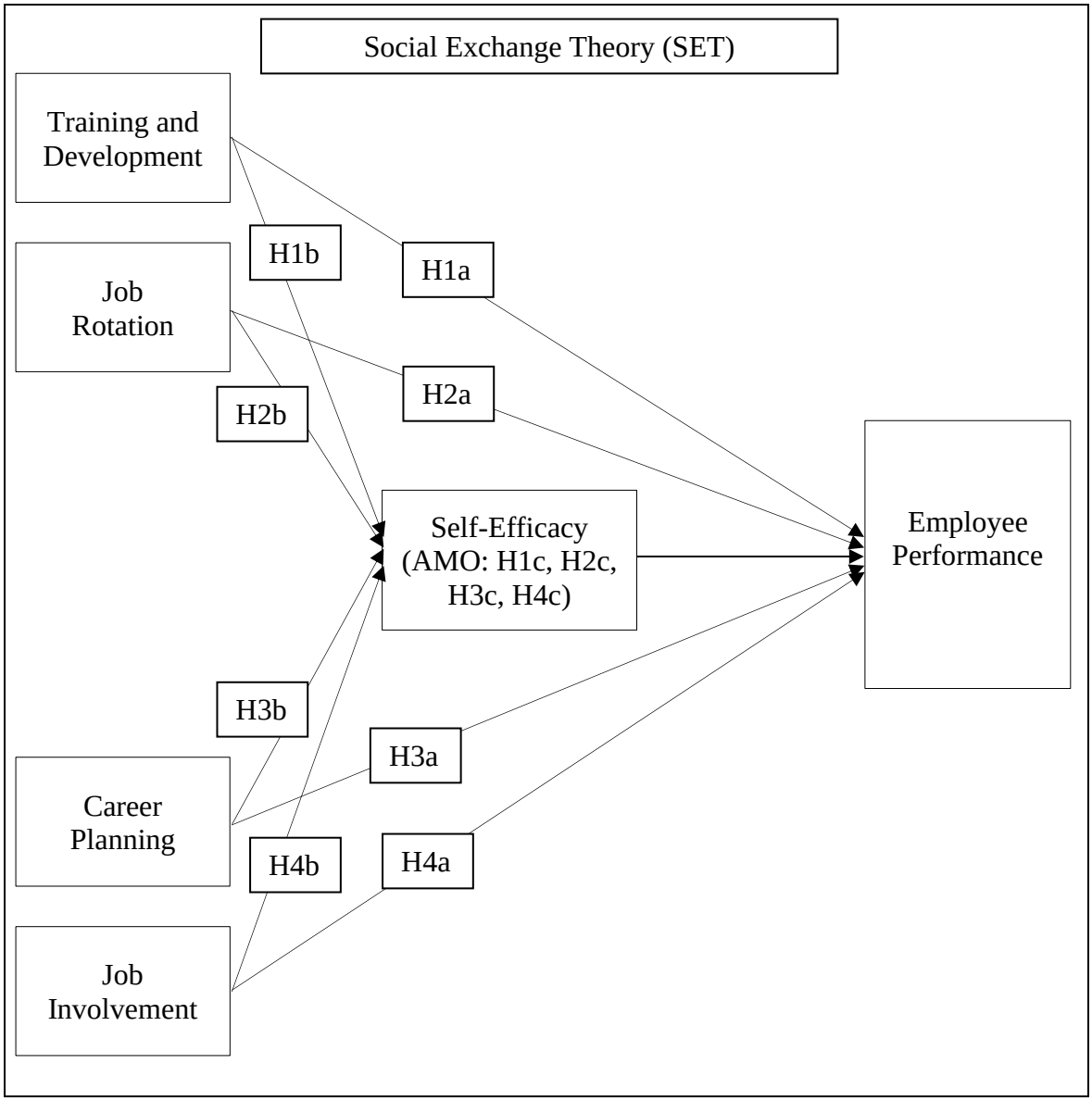


Figure 2.3: Conceptual Framework of the Study

Note: Researcher (2024)

Figure 2.3 illustrated the conceptual framework depicting the impact of AMO theory and SET on the relationship between HR practices, self-efficacy, and employee performance. The independent variables, HR practices—encompassing training and

development, job rotation, career planning, and job involvement—were explained by both AMO and SET theories. Employee performance served as the dependent variable, while perceived self-efficacy acted as the mediating variable, more strongly associated with the AMO theory.

In the conceptual framework, HR practices are designed to enhance employees' abilities, motivation, and opportunities, thereby improving self-efficacy—the belief in one's capability to perform tasks successfully. Increased self-efficacy, in turn, leads to higher employee performance. SET complements this framework by explaining the reciprocal nature of the employer-employee relationship; as organizations implement supportive HR practices, employees reciprocate with enhanced performance. Thus, combining SET and AMO theories provides a comprehensive understanding of how HR practices influence employee performance through the mediating role of self-efficacy.

2.9 Hypotheses Development

This research focused on examining the relationship among the identified independent variables and employee performance, with self-efficacy acting as a mediator, within PHEIs in Sarawak. The hypothesis of this research posited that employee performance was influenced by multiple independent factors, including training and development, job rotation, career planning, and job involvement. Additionally, this research sought to explore the role of self-efficacy as a mediator in the relationship between each independent variable and employee performance. These relationships were illustrated in Figure 2.3.

In this research, the development of hypotheses is grounded in two pivotal theories: SET and AMO framework. SET posits that social behavior is a result of an exchange process

where individuals seek to maximize benefits and minimize costs in their relationships. Whereas, the AMO framework suggests that employee performance is a function of three critical components: Ability (A), Motivation (M), and Opportunity (O). Within this framework, self-efficacy serves as a mediating variable, particularly aligned with the AMO model, as it reflects an individual's belief in their capability to execute tasks successfully. By mapping SET and the AMO model onto the hypotheses development, the framework offers a comprehensive understanding of how targeted HR practices can bolster self-efficacy and, consequently, elevate employee performance in PHEIs in Sarawak.

2.9.1 Relationship between training and development, and employee performance

The hypothesis derived from the conceptual framework aimed to test the relationship between training and development and employee performance. Training and development played a pivotal role in enhancing employee performance within organizations, particularly in the context of PHEIs in Sarawak.

Furthermore, the impact of training and development on employee performance, encompassing task, contextual, and adaptive performance, was well-documented. Task performance pertained to the execution of core job duties, contextual performance involved contributions to the organizational environment, and adaptive performance related to adjusting to changes and new situations. Previous studies by Diamantidis and Chatzoglou (2019), Karim et al. (2019), Nyaisu et al. (2017), Somuah et al. (2024), and Van Assen (2020) confirmed the positive correlation between training practices and improved employee performance. Karim et al. (2019) found that employees were not only aware of training opportunities but also motivated by them, leading to enhanced performance.

The proposed relationship between training and development and employee performance is supported by empirical studies demonstrating that well-structured training programs enhance various performance dimensions. Training equips employees with necessary skills and knowledge, leading to improved task performance—the efficient execution of core job responsibilities. Additionally, such programs foster contextual performance by encouraging behaviors that contribute positively to the organizational environment, such as teamwork and proactivity. The study recommended that training and development programs for all staff be actively monitored and made mandatory. Employers were advised to implement compulsory training programs for all employees to improve overall performance. Based on the above empirical and theoretical supports, this study formulated the following hypothesis:

H1a: There is a positive relationship between training and development, and employee performance.

2.9.2 Relationship between training and development and self-efficacy

Training and development were crucial for enhancing employees' self-efficacy, which referred to their belief in their ability to perform specific tasks successfully. Numerous studies demonstrated a positive significant relationship between training and self-efficacy (Ferrari, 2022; Mohanraj & Panchanatham, 2017). Well-structured training programs significantly improved an employee’s confidence in their skills and abilities. When employees received training that provided them with new knowledge and competencies, they were more likely to feel confident in their ability to perform their job duties effectively. This increase in confidence led to better job performance and higher motivation levels (Bandura, 1997).

Empirical research consistently demonstrated a positive significant relationship between training and development and self-efficacy, which referred to an individual's belief in their capability to execute tasks successfully. Studies by Galos and Aldridge (2021), Mata et al. (2021), Ferrari (2022), and Goulart et al. (2022) provided robust evidence that training initiatives significantly enhanced employees' self-efficacy. This relationship was further supported by Mazzetti and Schaufeli (2022) and Arulsamy (2023), who found that comprehensive training programs bolstered employees' confidence in their abilities, thereby fostering a more competent and self-assured workforce.

These findings suggest that well-designed training programs not only improve specific skills but also bolster employees' overall confidence, leading to enhanced performance across various dimensions. The research concluded that the complex interaction between employee training and development served as a dynamic factor that had a substantial influence on both employee performance and the overall success of an organization. Based on the above empirical and theoretical supports, this study formulated the following hypothesis:

H1b: There is a positive relationship between training and development, and self-efficacy.

2.9.3 Relationship between job rotation and employee performance

Job rotation was a strategic HR practice utilized by organizations to enhance employee performance and commitment. This practice involved systematically moving employees across various roles or tasks to broaden their skill sets, increase their understanding of different job functions, and improve their overall adaptability. Research on

the impact of job rotation on self-efficacy and employee performance within the context of PHEIs in Sarawak revealed mixed findings.

In terms of employee performance, job rotation was generally associated with positive outcomes. Studies by Gubicza and Remsei (2024), Cherotich et al. (2021), Lee et al. (2017), Tichat (2022), and Alaflaq et al. (2024) found that job rotation positively correlated with employee performance, particularly in enhancing task performance, contextual performance, and adaptive performance. The study by Alaflaq et al. (2024) demonstrated that job rotation positively impacted skill enhancement, job satisfaction, and overall performance. The statistical analysis consistently indicated that employees who underwent job rotation reported higher levels of work satisfaction, increased motivation, and improved performance. The study highlighted the importance of job rotation in enhancing employees' skills and expertise, advocating it as an effective strategy for industries to boost employee productivity.

Arasanmi and Krishna (2019) emphasized that job rotation enhanced employees' learning and skill acquisition, enabling them to better understand the capabilities and challenges of different departments. As an aspect of organizational climate, job rotation promoted information exchange and fostered cross-functional trust (Thongpapanl et al., 2018). Consequently, job rotation helped employees develop a deeper and broader understanding of other functional areas within the organization.

The relationship between job rotation and employee performance was not consistently direct. Previous studies indicated that the impact of HR practise such as job rotation on performance might have been mediated by human resource strategy and training effectiveness (Alizadeh Majd et al., 2024), job satisfaction (Yusof et al., 2023), motivation

and human factors (Ravikumar et al., 2020), and organizational commitment alongside job satisfaction (Suleman et al., 2022).

Nevertheless, some researchers reported insignificant relationships between job rotation and job performance. Previous studies observed that job rotation did not significantly affect employee performance (Jocom et al., 2017; Musawir et al., 2019), suggesting that the impact of job rotation on employee performance might have varied depending on the organizational context or the individual characteristics of the employees.

By exposing employees to diverse roles and responsibilities, job rotation broadens their skill sets, leading to improved task performance—the efficient execution of core job duties. Based on the above empirical and theoretical supports, this study formulated the following hypothesis:

H2a: There is a positive relationship between job rotation and employee performance.

2.9.4 Relationship between job rotation and self-efficacy

The relationship between job rotation and self-efficacy has been the focus of numerous studies, yielding varying results. Erum et al. (2020) found a positive significant relationship between job rotation and self-efficacy. Job rotation exposed employees to different tasks and roles, which enhanced their skills, knowledge, and confidence in handling diverse responsibilities, thereby increasing self-efficacy (Ghufran et al., 2022; Kusuma Hidayati et al., 2024; ShahidMahmood et al., 2022). This exposure encouraged learning and adaptability, key components of self-efficacy. However, Cetin and Askun (2018) found an insignificant relationship between job rotation and self-efficacy, particularly when the

rotations were poorly managed or when employees were not given adequate support during transitions. In such cases, job rotation led to stress and uncertainty, undermining self-efficacy rather than enhancing it. Therefore, while job rotation had the potential to positively impact self-efficacy, its effectiveness depended on how it was implemented within the organization.

Due to the limited research on the relationship between job rotation and self-efficacy, the researcher proposed the following hypothesis to explore this area further. This hypothesis aimed to examine whether job rotation positively impacted employees' self-efficacy and to what extent this relationship varied across different organizational contexts and employee roles. By investigating these aspects, the study aimed to contribute to a deeper understanding of how job rotation could be strategically used to enhance employee confidence and performance.

The proposed relationship between job rotation and self-efficacy is based on evidence suggesting that exposing employees to diverse tasks and roles can enhance their skills and confidence, thereby increasing self-efficacy. However, the effectiveness of job rotation in boosting self-efficacy depends on its implementation; poorly managed rotations without adequate support can lead to stress and uncertainty, undermining self-efficacy. Based on the above empirical and theoretical supports, this study formulated the following hypothesis:

H2b: There is a positive relationship between job rotation and development, and self-efficacy.

2.9.5 Relationship between career planning and employee performance

The existing literature consistently supported the notion that effective HR practices, including career planning, self-managed teams, and performance management, helped firms enhance their performance by fostering creativity, improving employee and customer satisfaction, and establishing positive brand reputations (Noe et al., 2019; Otoo, 2024). Research indicated a significant positive relationship between career planning and employee performance. Past studies provided empirical evidence demonstrating that well-structured career planning initiatives led to improved employee performance, thus explaining the positive relationships between career planning and employee performance (Ahmed, 2019; Arif et al., 2022; Burić & Moe, 2020; Florence, 2020; Rizanuddin, 2020; Wulantika & Ayuningtias, 2020). The process of career planning encouraged individual employees to perform at their best within the organization (Mahmood, 2021).

Contrary to the predominantly positive findings, some researchers argued for an insignificant relationship between career planning and performance under specific conditions. When organizational support was lacking or career planning practices were perceived as unfair, the anticipated positive effects on performance did not materialize (Devika et al., 2021; ShahidMahmood et al., 2022). This suggested that the effectiveness of career planning was contingent on its implementation and the broader organizational context. Furthermore, the relationship between career planning and employee performance was not always direct. Previous studies demonstrated that career planning impacted career certainty (Mohd Hazwan et al., 2023), work effectiveness (Rizanuddin, 2020), and job satisfaction, with career development acting as a mediator (Hasan et al., 2023).

The proposed relationship between career planning and employee performance is grounded in the understanding that structured career planning initiatives enhance employee motivation and productivity. By aligning individual aspirations with organizational goals, career planning fosters a sense of direction and commitment among employees, leading to improved performance. Based on the above empirical and theoretical supports, this study formulated the following hypothesis:

H3a: There is a positive relationship between career planning and employee performance.

2.9.6 Relationship between career planning and self-efficacy

The relationship between career planning and self-efficacy was explored in various studies, with findings generally indicating a positive connection. Previous research consistently showed a positive relationship between effective career planning and increased self-efficacy (Chan, 2018; Kleine et al., 2021; Monteiro et al., 2021; Wilhelm & Hirschi, 2019). When individuals engaged in career planning, they tended to set clearer goals and develop strategies to achieve them, which, in turn, enhanced their belief in their ability to succeed (Chan, 2020). This process of planning and goal setting contributed to a stronger sense of self-efficacy, as individuals felt more prepared and confident in their career paths.

However, some researchers found an insignificant relationship between career planning and self-efficacy, particularly when the planning process lacked clarity or when individuals felt overwhelmed by the uncertainty of future career outcomes (Mahmud et al., 2019; Song et al., 2006; Zhao & Wu, 2022). In such cases, instead of boosting self-efficacy, career planning led to anxiety or doubt, diminishing an individual's confidence in their ability to achieve career success. These mixed findings suggested that while career planning could

enhance self-efficacy, its impact varied depending on how it was approached and the individual's circumstances.

Engaging in career planning enables individuals to set clear goals and develop strategies to achieve them, thereby enhancing their belief in their capabilities. Based on the above empirical and theoretical supports, this study formulated the following hypothesis:

H3b: There is a positive relationship between career planning and self-efficacy.

2.9.7 Relationship between job involvement and employee performance

Research has revealed that the impact of job involvement on job performance varies based on the accuracy of job involvement measurement and the specific definition of job performance (Ahakwa et al., 2021; Chughtai, 2008; Rotenberry & Moberg, 2007; Subiyanto et al., 2022). Research consistently demonstrated that job involvement, defined as the degree to which an individual was psychologically engaged in their work, significantly impacted employee performance (Hermawati & Mas, 2017; Johari & Yahya, 2016; Musafir, 2022; Thevanes & Dirojan, 2018). When employees exhibited high levels of job involvement, they were more likely to be committed to their roles, thereby enhancing their performance outcomes (Bagia et al., 2020; Samuel et al., 2021).

While multiple studies established a positive and significant relationship between job involvement and employee performance, some researchers reported findings suggesting an insignificant relationship between these variables (Prasetyo et al., 2021; Srivastava & Pathak, 2019). Prasetyo et al. (2021) argued that job involvement did not necessarily lead to improved job performance. Previous research indicated that the relationship between job involvement and employee performance was influenced by other mediators such as

organizational commitment (Chughtai, 2008), job satisfaction (Wardiansyah et al., 2024), and effort (Akhsan et al., 2019).

Past literatures have demonstrated that job involvement, defined as the degree to which an individual is psychologically engaged in their work, significantly impacts employee performance. Employees with high job involvement are more likely to be committed to their roles, leading to enhanced performance outcomes. Based on the above empirical and theoretical supports, this study formulated the following hypothesis:

H4a: There is a positive relationship between job involvement and employee performance.

2.9.8 Relationship between job involvement and self-efficacy

The connection between job involvement and self-efficacy was a significant area of research in understanding employee motivation and performance. Previous studies indicated a positive correlation between the two, where higher job involvement—reflecting an individual's psychological investment in their work—often led to increased self-efficacy (Chuang et al., 2018; Demir, 2020; Roswandi et al., 2021; Tariq & Diana, 2022; Yang et al., 2006; Yusuf, 2024). This deep engagement fostered a sense of competence and mastery, thereby reinforcing self-efficacy.

Further emphasizing the significant relationship between job involvement and self-efficacy, studies showed that when employees were deeply involved in their work, they not only felt more competent but also took greater initiative in overcoming challenges (Albrecht et al., 2023). This heightened level of involvement encouraged continuous learning and skill development, which further strengthened self-efficacy over time. The positive feedback loop

created by job involvement and self-efficacy led to sustained high performance and job satisfaction, making it a critical factor in employee development and organizational success (Sypniewska et al., 2023).

Empirical studies have demonstrated a positive correlation between job involvement and self-efficacy among academicians in higher education institutions, emphasizing the importance of fostering a work environment that promotes job involvement to bolster self-efficacy. Based on the above empirical and theoretical supports, this study formulated the following hypothesis:

H4b: There is a positive relationship between job involvement and self-efficacy.

2.9.9 Relationship between self-efficacy and employee performance

Research consistently demonstrated a strong positive relationship between self-efficacy and employee performance. Employees with high self-efficacy were generally more confident in their abilities, which motivated them to take on challenging tasks and persist despite setbacks. This confidence often led to higher productivity, better problem-solving, and overall enhanced job performance (Cetin & Askun, 2018; Moè et al., 2010; Salman et al., 2016). The belief in their own capabilities allowed these employees to set ambitious goals and strive to achieve them, significantly contributing to their success in the workplace. Rossiandy and Indradewa (2023) highlighted that teachers with high self-efficacy were more effective and efficient in their work, as they actively developed relevant skills, managed tasks, and prioritized effectively, leading to increased productivity. Such teachers were also more willing to take on additional responsibilities, driven by their confidence in their abilities, which enhanced their contribution to the organization.

The evidence suggested that fostering self-efficacy among employees was a key strategy for enhancing performance, particularly in roles requiring high levels of autonomy and creativity. Organizations supported this by providing opportunities for skill development, offering constructive feedback, and creating an environment that encouraged confidence and initiative. Employees with high self-efficacy managed their tasks effectively and met organizational standards, thereby enhancing performance (Al-Ajarmeh, 2022; Basyir, 2019; Hadi, 2023; Harini et al., 2019). Based on the above empirical and theoretical supports, this study formulated the following hypothesis:

H5: There is a positive relationship between self-efficacy and employee performance.

2.9.10 Mediating Effect of Self-Efficacy

In this study, self-efficacy represented the ability component of AMO theory and was proposed as the mediating mechanism in the relationship between four HR practices and employee performance. Parker (1998) explored how HR practices impacted employees' ability to perform within an organization. The study suggested that organizational interventions such as training and development, job rotation, career planning, and job involvement could enhance employees' confidence in their abilities. Prior research indicated that these interventions significantly boosted employees' self-efficacy by improving their perceptions of their capability to perform specific tasks, thereby highlighting their importance in promoting overall employee performance.

Self-efficacy was a crucial mediator in the relationship between training and development and employee performance. Research consistently supported the idea that training and development programs enhanced employees' skills and knowledge, which, in

turn, boosted their self-efficacy. Based on previous research findings, self-efficacy was identified as a significant mediator in the relationship between training and development and employee performance. Studies demonstrated a positive relationship between employees' self-efficacy and their ability to translate training outcomes into improved performance (Khaiyal, 2022; Lyons & Bandura, 2022; Saad et al., 2022; Somuah et al., 2024; Zaki et al., 2019).

Similarly, self-efficacy mediated the relationship between job rotation and employee performance. Job rotation exposed employees to various roles and tasks, significantly increasing their self-efficacy by broadening their skills and experiences. This increase in self-efficacy often led to better job performance, as employees felt more capable and adaptable in different situations (Ghufran et al., 2022; Soebandono & Nilawati, 2016).

In the context of career planning, self-efficacy served as one of the key mediators influencing employee performance. Research consistently demonstrated that effective career planning, involving the setting of clear goals and strategies, enhanced self-efficacy by providing employees with a sense of direction and control over their careers (Dan et al., 2018; Hamzah et al., 2022; Wulantika & Ayuningtias, 2020). This increased self-efficacy translated into improved performance, as employees became more motivated and confident in pursuing their career objectives.

Lastly, the relationship between job involvement and employee performance was also mediated by self-efficacy. Employees who were deeply involved in their jobs tended to develop higher self-efficacy, which further enhanced their performance. Research supported the idea that job involvement cultivated a sense of competence and mastery, which in turn strengthened self-efficacy and subsequently improved employee performance (Ali &

Wardoyo, 2021; Hadi, 2023; Yusuf, 2024). Recent studies further clarified the complex interplay between these variables. Yusuf (2024) study found that job involvement directly enhanced employee performance, and this effect was significantly amplified when employees possessed high self-efficacy. This indicated that self-efficacy not only contributed independently to performance but also reinforced the positive impact of job involvement. Conversely, Yusnita (2021) pointed that in environments where self-efficacy was low, the benefits of job involvement on performance were significantly reduced. These findings indicated that self-efficacy served as a critical mediator in the relationship between job involvement and performance, emphasizing its importance in HR practices.

In the context of PHEIs in Sarawak, the relationship between self-efficacy and employee performance is particularly significant. Academic and non-academic staff with high self-efficacy are more likely to engage effectively in their roles, adapt to the evolving educational landscape, and contribute positively to institutional goals. This is crucial for PHEIs aiming to enhance educational quality and competitiveness.

While there were few studies on self-efficacy as a mediator between various HR practices and employee performance, its application within educational institutions, particularly among both academic and non-academic staff, remains underexplored. Most existing research focuses on academic staff or student outcomes, leaving a gap in understanding how self-efficacy functions across all employee categories within educational settings. By investigating self-efficacy as a mediator in this broader context, this study aims to provide novel insights into its role in enhancing employee performance among both academic and non-academic staff in educational institutions. Therefore, based on the arguments presented, this study hypothesized that:

H1c. Self-efficacy mediate the relationship between training and development, and employee performance.

H2c. Self-efficacy mediate the relationship between job rotation and employee performance.

H3c. Self-efficacy mediate the relationship between career planning and employee performance.

H4c. Self-efficacy mediate the relationship between job involvement and employee performance.

2.10 Summary of Important Literature Review of Past Studies

To provide a concise overview of the existing research relevant to this study, Table 2.1 summarized the literature review. The table included the authors, publication year, key findings, and the relevance of each study to the current research.

Table 2.1: Literature Review Summary

Authors (Year)	Key Findings	Relevance to Current Study
(1a) Relationship between Training and Development; and Employee Performance		
Aktar (2023)	The study found that informal learning methods in training and development significantly enhanced employee satisfaction and performance in commercial banks.	Provides evidence for Hypothesis 1a.
Al-refaei (2021)	The findings indicated that training and development positively impacted organizational commitment, concluding that enhancing employee skills and knowledge increased their commitment to the organization.	
Diamantidis and Chatzoglou (2019)	The results revealed that the job environment and management support exerted the most significant influence, both direct and indirect, on job performance, while adaptability and intrinsic motivation had a direct effect on job performance.	
Karim et al. (2019)	Training was identified as a critical factor benefiting both individuals and organizations by enhancing skills, knowledge, abilities, and job satisfaction, thereby contributing to the achievement of organizational objectives.	
Nyaisu et al. (2017)	The study revealed a significant relationship between learning styles and training methods on job performance, recommending improvements to both in order to enhance job performance and motivate learners to acquire knowledge and skills.	
Obasi & Wokoma (2018)	The paper concluded that training and development were essential for maximizing employee performance, efficiency, satisfaction, and innovation, recommending increased participation in such programs to enhance service delivery.	
Sifawa & Mukasa (2024)	The study findings indicated that Continuous Professional Development (CPD) played a crucial role in enhancing teaching performance among academic staff.	
Somuah et al. (2024)	The direct regression results showed that training had a significantly positive impact on adaptive performance compared to task and contextual performance.	
Van Assen (2020)	Training for continuous improvement was recommended to be comprehensive, integrating both theoretical and practical components, while considering its individual and strategic importance to the organization.	

Table 2.1 continued

Walker & Derbyshire (2020)	The study found that human resource development (HRD) enhanced organizational creativity and innovation, highlighting the role of HRD practices like training and rewards in fostering an innovation-friendly climate.	
(1b) Relationship between Training and Development; and Self-Efficacy		
Arulsamy (2023)	The findings suggested that aligning training and development with the firm's strategic goals motivated employees to actively apply their new skills to achieve organizational objectives.	Provides evidence for Hypothesis 1b.
Bandura (1997)	The study found that high self-efficacy encouraged interest, engagement, the setting of challenging goals, and a strong commitment to achieving them.	
Ferrari (2022)	The study demonstrated a positive correlation between skill-match and career commitment, highlighted the need for training approaches aligned with social learning theory, emphasized the importance of involving change recipients in training needs analysis, demonstrated the value of an analytical skills-based approach, and contributed to evidence-based change management by questioning the strategic role of soft skills during front-office job changes.	
Galos and Aldridge (2021)	The study contributed to the limited research on primary school learning environments, particularly by exploring perceptual differences between at-risk and non-at-risk students, offering valuable insights for teachers to create supportive and challenging environments that enhanced self-efficacy and learning outcomes, especially for students at risk.	
Goulart et al. (2022)	The findings confirmed a positive relationship between self-efficacy and training effectiveness, indicating that investing in high-efficacy individuals enhanced learning and work outcomes in cooperative organizations.	
Mata et al. (2021),	This systematic review of eight studies on communication skills training for health professionals revealed improvements in performance and self-efficacy through various teaching strategies. However, it also highlighted the need for more standardized, comprehensive research to enhance training effectiveness and address gaps in methodology and assessment.	

Table 2.1 continued

Mazzetti & Schaufeli (2022)	The study found that engaging leadership positively impacted individual work engagement and team effectiveness, with personal and team resources serving as mediators, underscoring the importance of training leaders to inspire and connect with their subordinates for improved organizational outcomes.	
Mohanraj & Panchanatham (2017)	The study found that training significantly enhanced the self-efficacy of bank employees in Chennai, as demonstrated by Structural Equation Modeling (SEM) results from a survey of 150 employees across five private banks.	
(2a) Relationship between Job Rotation and Employee Performance		
Alaflaq et al. (2024)	The results confirmed the model's reliability and validity, showing that job rotation positively correlated with and significantly enhanced employee motivation, performance, satisfaction, knowledge, and skills.	Provides evidence for Hypothesis 2a.
Arasanmi & Krishna (2019)	The study found that perceived organizational support (POS) influenced employee retention, significantly impacted organizational commitment (OC), and that OC mediated the relationship between POS and retention.	
Cherotich et al. (2021)	The study found that hospital workers preferred job rotation within their function, with adaptability influencing its effectiveness. Job rotation between departments reduced monotony, boosted motivation and performance, and its proper implementation was linked to improved service delivery and skill acquisition at the hospitals.	
Gubicza & Remsei (2024)	The paper found that job rotation, defined as systematically reassigning employees across roles, enhanced workforce adaptability, skill diversity, and satisfaction, while fostering a culture of continuous learning. It highlighted both the benefits and challenges of job rotation, with examples from Mazda and Intel, demonstrating its effectiveness in creating a versatile and dynamic workforce that contributed to organizational success.	

Table 2.1 continued

Lee et al. (2017)	The study found that job rotation stress in nurses significantly impacted both challenge and hindrance stress, directly and indirectly affecting their psychological well-being. While challenge stress had a positive effect, hindrance stress negatively impacted well-being, emphasizing the need for nursing organizations to manage stress and create a supportive environment to ensure that job rotation became a positive experience.	
Suleman et al. (2022)	The results showed that organizational commitment and job satisfaction partially mediated the relationship between job rotation practices and employee performance.	
Thongpapanl et al., 2018	The study demonstrated that job rotation and joint rewards strongly promoted interdepartmental collaboration, thereby boosting firm performance, although firm size and age negatively moderated these relationships.	
Tichat (2022)	The study identified a positive and statistically significant relationship between job rotation and employee performance at the National Savings and Reserve Fund-Bank Reghaia.	
Yakubu & Majeed (2018)	The study suggested that job rotation enhanced productivity, supported employee retention, promoted career development, and facilitated training opportunities.	
(2b) Relationship between Job Rotation and Self-Efficacy		
Cetin and Askun (2018)	The study found that occupational self-efficacy and intrinsic motivation significantly impacted work performance, with intrinsic motivation partially mediating this relationship, providing valuable insights for enhancing employee motivation and performance.	Provides evidence for Hypothesis 2b.
Erum et al. (2020)	The study found that self-efficacy partially mediated the relationship between family motivation, civility, and affective commitment, and fully mediated their relationship with organizational citizenship behavior. It introduced family motivation as a novel antecedent for positive behavioral outcomes, thereby expanding the literature on family-work enrichment.	

Table 2.1 continued

(3a) Relationship between Career Planning and Employee Performance		
Ahmed (2019)	The results showed that 36.4% of the variance in career commitment was explained by independent variables, with self-efficacy and organizational commitment having significant positive relationships with career commitment.	Provides evidence for Hypothesis 3a.
Arif et al. (2022)	The study found that managerial ability and career planning significantly impacted job satisfaction and employee performance at PT. Bank BTPN Tbk. Pekanbaru Branch, with managerial ability being the most influential factor on employee performance and career planning the least.	
Burić & Moe (2020)	The study found that teacher enthusiasm was directly influenced by positive emotions and indirectly through self-efficacy and job satisfaction.	
Florence (2020)	The study found that both succession planning and career training positively and significantly influenced employee performance in Kenyan state corporations. It recommended enhancing employee awareness of career management policies, improving supervisor communication, and aligning staff with roles that match their skills for competitive advantage.	
Litynska (2023)	The study found that career planning of scientific-pedagogical personnel in higher education institutions required management decisions, personalized career plans, and continuous monitoring to ensure successful career advancement.	
Mahmood (2021)	The study found that job rotation, training and development, compensation, career planning, and performance appraisal positively impacted employee performance in the Punjab Police, Pakistan. It recommended enhancing these HR practices to improve overall employee performance.	
Rizanuddin (2020)	The study found that career planning, leadership, and organizational culture at the Regional Civil Service Agency of Majalengka Regency positively and significantly influenced employee work effectiveness, both individually and collectively.	
Suparjo & Nurchayati (2022)	The study found a strong relationship between career mentoring and improved employee job performance at UNTAG Semarang, recommending organizations implement career counseling to enhance skill acquisition and job performance.	

Table 2.1 continued

Van der Heijden et al. (2022)	The study found that career commitment was linked to specific dimensions of employability, which in turn positively impacted both objective and subjective career success among university staff.	
Wulantika & Ayuningtias (2020)	The study found that both career planning and self-efficacy significantly impacted employee performance at PT Perkebunan Nusantara VIII Bandung, both individually and collectively. Strengthening career planning enhanced self-efficacy, leading to improved employee performance.	
(3b) Relationship between Career Planning and Self-Efficacy		
Chan (2018)	The study found that social support, career self-efficacy, and career exploration were positively correlated with career choices among college athletes.	Provides evidence for Hypothesis 3b.
Chan (2020)	The study found that career decision-making self-efficacy influenced vocational interests, outcome expectations, and career goals among Taiwanese college athletes, with social support impacting career goals indirectly through self-efficacy.	
Kleine et al. (2021)	The study found that a meta-analysis supported the Career Self-Management model in college students, showing that self-efficacy, outcome expectations, and career-exploratory goals positively impacted career exploration, which was also linked to career support, decidedness, and employability.	
Mahmud et al. (2019)	The study found a significant negative relationship between dysfunctional career thinking and career self-efficacy, indicating that students with lower career readiness might benefit from targeted interventions.	
Monteiro et al. (2021)	The study found that self-efficacy and career goals positively influenced career planning in elite soccer players, while athletic identity (AI) negatively impacted it. Balancing AI with high self-efficacy and clear career goals was crucial for effective career planning and retirement preparation.	
Song et al. (2006)	The study found that job-search attitude and subjective norm, but not self-efficacy, positively influenced job-search intentions.	

Table 2.1 continued

Wilhelm & Hirschi (2019)	The study found that Career Self-Management (CSM) was linked to career well-being, suggesting interventions and organizational support to promote it, while also identifying research gaps such as conceptual refinement and contextual influences in Industry 4.0.	
Zhao & Wu (2022)	The study found that taking career development courses significantly improved students' career awareness, job search self-efficacy, and career planning abilities. More courses led to greater improvements, with college major and family income also influencing these outcomes. The study recommended leveraging these courses to enhance students' career preparation.	
(4a) Relationship between Job Involvement and Employee Performance		
Ahakwa et al. (2021)	The study found that organizational commitment fully mediated the relationship between work environment and employee performance in Ghana's banking sector, with strong internal consistency and validity in the data. It recommended enhancing the work environment to boost employee morale and productivity.	Provides evidence for Hypothesis 4a.
Bagia et al. (2020)	The study found that job involvement, job characteristics, and organizational commitment each had a significant positive influence on employee performance in the district government of Bali Province.	
Bastian & Widodo (2022)	The study found that innovative behavior, job involvement, and organizational citizenship behavior (OCB) significantly influenced Indonesian lecturers' task performance, with job involvement playing a more prominent mediating role than OCB. A new model linking innovative behavior, job involvement, and OCB to task performance was developed, offering insights for improving lecturers' performance.	
Chughtai (2008)	The study found that job involvement positively correlated with both in-role job performance and organizational citizenship behavior (OCB), with a stronger impact on OCB. Organizational commitment partially mediated the job involvement-performance relationship.	
Gopinath (2020)	The analysis found no significant relationship between demographic factors and job involvement or organizational commitment, but job involvement significantly influenced organizational commitment.	

Table 2.1 continued

Hakim et al. (2021)	The study found that job involvement did not directly impact job performance, but it influenced performance indirectly through organizational citizenship behavior (OCB). This indicated that OCB played a crucial role in linking job involvement to improved job performance.
Hermawati & Mas (2017)	The research found that Quality of Work Life (QWL), job involvement, and OCB mediated the impact of transglobal leadership on employee performance in East Java cooperatives, emphasizing the importance of these mediators in the relationship between leadership and performance.
Johari & Yahya (2016)	The findings showed that task significance and feedback significantly impacted job performance, mediated by work involvement, while skill variety directly influenced public servants' job performance.
Musafir (2022)	The study found that employee satisfaction positively and significantly affected job involvement and performance, while perceived organizational support had no significant impact. Job involvement also significantly enhanced employee performance.
Rotenberry & Moberg (2007)	Employees' self-reported job involvement significantly predicted supervisor performance ratings, beyond the influence of work centrality.
Samuel et al. (2021)	The study found that job involvement significantly impacted job performance among bank marketers, particularly in areas such as due process, learning, and customer relations. It recommended that banks promote job involvement to enhance performance and foster positive employee attitudes.
Subiyanto et al. (2022)	The study found that employee engagement, perceived organizational support, and motivation each had a positive and significant impact on employee performance at PT. Dino Jaya Karya, both individually and collectively.
Thevanes & Dirojan (2018)	The study found positive and significant relationships between both training and job performance, and job involvement and job performance among employees at Sri Lanka Telecom. These findings highlighted the importance of enhancing training and job involvement to boost employee performance.
Wardiansyah et al. (2024)	The study found that employee motivation increased job performance and job satisfaction, which in turn further boosted job performance.

Table 2.1 continued

(4b) Relationship between Job involvement and Self-Efficacy		
Chuang et al. (2018)	The study revealed that team effectiveness significantly influenced social support, self-efficacy, and job involvement, which subsequently impacted work performance in the logistics industry. The research underscored the importance of addressing job burnout, work stress, and job involvement to improve employee performance.	Provides evidence for Hypothesis 4b.
Demir (2020)	Increased teacher self-efficacy enhanced job satisfaction, organizational commitment, motivation, and job involvement. Job satisfaction and organizational commitment partially mediated the link between self-efficacy and motivation, while job satisfaction and motivation fully mediated the impact of self-efficacy on job involvement.	
Roswandi et al. (2021)	The study demonstrated that self-efficacy and job involvement both positively influenced job satisfaction among family planning field workers, with self-efficacy also positively affecting job involvement. These factors were crucial in enhancing job satisfaction.	
Tariq & Diana (2022)	A significant positive correlation was found between self-efficacy beliefs and job involvement among academicians, with higher self-efficacy leading to greater job involvement, although work experience primarily influenced self-efficacy, not job involvement.	
Yang et al. (2006)	The study indicated that clinical nursing teachers in Taiwan exhibited medium to high levels of self-efficacy and job involvement, both significantly influenced by various personal and professional factors, with a positive correlation between the two.	
Yusuf (2024)	The study determined that job involvement and locus of control positively and significantly impacted employee performance, with self-efficacy serving as a key mediating factor between these variables and performance.	

Table 2.1 continued

(5) Relationship between Self-Efficacy and Employee Performance		
Al-Ajarmeh (2022)	The study revealed that self-perceived job performance among critical care nurses was significantly associated with gender, age, workplace, ICU type, and patient load, with conflict management identified as the only significant predictor of nursing performance.	Provides evidence for Hypothesis 5.
Basyir (2019)	The study demonstrated that self-efficacy and job satisfaction significantly impacted employee performance at the Gayo Lues Regency Secretariat. It suggested enhancing employee engagement and providing better facilities to improve performance.	
Cetin & Askun (2018)	The study indicated that occupational self-efficacy and intrinsic motivation significantly influenced work performance, with intrinsic motivation partially mediating this relationship, offering valuable insights for improving employee motivation and performance.	
Gautam & Basnet (2022)	The findings highlighted that learning performance significantly mediated the relationship between training factors (self-efficacy, trainee motivation, content, trainer characteristics, supervisor support, and learning culture) and transfer performance.	
Hadi (2023)	The study revealed that self-efficacy positively and significantly impacted employee performance, with work motivation and job involvement both serving as significant mediators in this relationship.	
Harini et al. (2019)	The study demonstrated that work-life balance, job satisfaction, and work engagement significantly influenced lecturers' organizational commitment, underscoring the importance of balancing personal and professional needs to enhance commitment.	
Kumar Pradhan et al. (2020)	The study indicated that resilience moderated the positive relationship between self-efficacy and workplace well-being among executives in Indian manufacturing industries, suggesting that higher self-efficacy and resilience led to improved workplace well-being.	

Table 2.1 continued

Moè et al. (2010)	The study found positive affect and self-efficacy mediated the relationship between teaching strategies/practices and job satisfaction, suggesting that effective teaching alone did not guarantee satisfaction; positive affect and self-efficacy were also essential.	
Rossiandy & Indradewa (2023)	The study revealed that teacher self-efficacy directly influenced job satisfaction, motivation, and job performance, but did not affect job performance through motivation and organizational commitment. It suggested that strengthening teacher self-efficacy through professional development and rewards could positively impact motivation.	
Salman et al. (2016)	The results demonstrated that self-efficacy was positively associated with job satisfaction, absenteeism, and job commitment, which were key dimensions of job performance in this study.	
Zamiri et al. (2020)	The results indicated that organizational intelligence, workplace-life skills, and employee empowerment training significantly increased productivity and socialization in employees with job stress compared to the control group.	
(1c, 2c, 3c & 4c) Mediating Effect of Self-Efficacy		
Ali & Wardoyo (2021)	The study revealed that job satisfaction mediated the relationship between self-efficacy and employee performance, with self-efficacy enhancing satisfaction, which subsequently improved performance. A comfortable work environment and motivation were identified as essential factors for enhancing employee performance.	Provides evidence for Hypotheses 1c, 2c, 3c and 4c.
Dan et al. (2018)	The results indicated that innovative behavior and structural empowerment were positively linked to career success, with self-efficacy mediating these relationships.	
Ghufran et al. (2022)	The study demonstrated that self-efficacy, work environment, and job rotation positively influenced employee engagement and performance at PT Pupuk Iskandar Muda (PIM), with employee engagement partially mediating these effects.	

Table 2.1 continued

Hadi (2023)	The study showed that self-efficacy significantly influenced employee performance, with work motivation and job involvement both serving as significant mediators in this relationship.
Hamzah et al. (2022)	The study found that career aspiration and organizational support positively impacted subjective career success among Malaysian women managers, with self-efficacy mediating these relationships.
Khaiyal (2022)	The study confirmed that self-efficacy partially mediated the relationship between training and employee performance in Pakistan's banking sector, highlighting the importance of incorporating self-efficacy cues in training to enhance performance.
Lyons & Bandura (2022)	A method was developed for managers in coaching roles to foster mutual support, stimulate employee engagement and motivation, and enhance interactions between managers and employees.
Saad et al. (2022)	The study confirmed that self-efficacy partially mediated the relationship between training and employee performance in Pakistan's banking sector, emphasizing the role of self-efficacy in enhancing employee performance through training.
Soebandono & Nilawati (2016)	The study found that individual task proactivity mediated the relationship between self-efficacy and employee performance in logistics companies, with employees exhibiting high levels of self-efficacy, task proactivity, and performance.
Somuah et al. (2024)	The results suggested that self-efficacy partially mediated the relationship between training and adaptive performance, while it fully mediated the effect of training on task and contextual performance, indicating that training enhanced these performances primarily by boosting self-efficacy in non-teaching staff.
Wulantika & Ayuningtias (2020)	The study demonstrated that both career planning and self-efficacy significantly impacted employee performance at PT Perkebunan Nusantara VIII Bandung, both individually and together. Strengthening career planning was found to enhance self-efficacy, leading to improved employee performance.
Yusuf (2024)	The study revealed that job involvement and locus of control positively and significantly impacted employee performance, with self-efficacy serving as a key mediating factor between these variables and performance.

Table 2.1 continued

Zaki et al. (2019)	The study confirmed that self-efficacy partially mediated the relationship between training and employee performance in Pakistan's banking sector, underscoring its importance in enhancing performance through training.

2.11 Chapter Summary

The literature review chapter examined the impact of HR practices on employee performance within PHEIs in Sarawak, emphasizing the mediating role of self-efficacy. The HR practices analyzed included training and development, job rotation, career planning, and job involvement. The review demonstrated that these practices significantly enhanced employee performance by improving skills, adaptability, and career progression opportunities, which subsequently elevated self-efficacy. The chapter integrated Social Exchange Theory, which explained the reciprocal relationship between employees and organizations, and the AMO Theory (Ability, Motivation, and Opportunity), which highlighted the importance of equipping employees with the necessary resources, motivation, and opportunities to optimize performance. Empirical studies reviewed established that self-efficacy served as a crucial mediator, linking HR practices to improved employee performance, thereby providing a comprehensive understanding of how these variables interacted within the specific context of PHEIs in Sarawak.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter presented the methodological framework utilized in the study. It described the research design approach, explained the measurement of research variables, discussed the development and application of questionnaires, detailed the sampling framework and selection criteria, outlined the data collection procedure, and specified the analytical techniques used to test the study's hypotheses.

3.2 Research Paradigm

The research paradigm referred to the theoretical or philosophical foundation underlying the research work. Guba and Lincoln (1994), prominent figures in the field, described a paradigm as a fundamental set of beliefs or a worldview that directed the course of research or investigation. In a similar context, Denzin and Lincoln (2000) defined a paradigm as a human construct that addressed foundational principles or ultimate truths, indicating the researcher's standpoint for constructing meaning from data.

Saunders et al. (2023) explained that two primary research paradigms existed: positivist and interpretive. The positivist paradigm, originating with the ideas of Auguste Comte (1798-1857), a well-known French philosopher, gained particular popularity in social science research (Moore, 2010). Saunders et al. (2012) described this paradigm as grounded in the belief that researchers could study social realities in an objective manner.

Positivism was based on the notion that social events could be understood by measuring them using methods such as experiments and analyzing statistical relationships

to determine cause and effect (Creswell, 2009). Those who adhered to positivism employed a logical process to test hypotheses derived from theory and real-world observations, with the objective of reaching conclusions that could be broadly applicable and contribute to the improvement or adjustment of existing theories (Bell et al., 2019). Maksimović and Evtimov (2023) described positivists as those who advocated for a science that was objective, valid, and unbiased, emphasizing accurate measurements and statistical tests to verify theories concerning cause and effect. They also believed in replicating studies to confirm the results.

In contrast, the interpretive paradigm, also referred to as the constructivist or anti-positivist paradigm, was rooted in the ideas of Edmund Husserl (1859-1938), a German philosopher and mathematician (Bonache & Festing, 2020). In contrast to positivism, interpretivism proposed that the most effective way to understand human social life was through qualitative methods such as interviews, observation, and case studies (Neuman, 2011). This approach viewed social reality as something that individuals created and interpreted differently, emphasizing the necessity for researchers to engage closely with participants to fully comprehend their experiences and perspectives (Creswell, 2009).

The study aimed to validate a theoretical structural model proposing that employee performance was influenced by self-efficacy, which acted as a mediator in the relationships between training and development, job rotation, career planning, and job involvement. Utilizing a deductive research methodology, this investigation was guided by four objectives and tested thirteen corresponding hypotheses grounded in a theory-testing and verification approach. In alignment with the philosophical foundations discussed, the survey primarily adopted a positivist perspective, with objectivism serving as the underlying ontological and epistemological position.

3.3 Research Design

Creswell (1994), Zikmund, Carr, and Griffin (2013), Schoonenboom and Johnson (2017), and Clark and Causer (2020) defined research design as the master plan outlining all procedures and methods used for data collection and analysis. This study employed a quantitative research design, which explained phenomena through numerical data analyzed using statistical methods (Balnaves & Caputi, 2001; Bradley et al., 2007; Williams, 2011).

The primary objective of this research was to find out how self-efficacy acted as a mediator between HR practices and employee performance. Given this objective, a quantitative research design was deemed most appropriate. The generation of reliable demographic data and the establishment of cause-and-effect relationships—the objectives of this study—were made possible by quantitative research. Online questionnaires were distributed to gather primary data for this study, which focused on both academic and non-academic staff at the individual level of analysis. It was reasonable to use individuals as the unit of analysis because the objective of the study was to evaluate how every staff member perceived the influence of HR practices and self-efficacy on their performance.

Implementing job rotation among academic staff in PHEIs in Sarawak can significantly enhance professional development and institutional adaptability. By allowing academic staff to teach diverse subjects or participate in various administrative roles, job rotation broadens their skill sets and fosters a comprehensive understanding of institutional operations. This approach not only enriches individual competencies but also promotes interdisciplinary collaboration, leading to a more cohesive academic environment. Moreover, job rotation can increase job satisfaction and motivation by providing varied experiences, thereby reducing monotony and the risk of burnout. In the context of Sarawak's

PHEIs, where attracting and retaining qualified academic staff can be challenging, implementing job rotation serves as a strategic tool to enhance employee engagement and retention. This practice aligns with the institutions' goals of maintaining a dynamic and versatile workforce capable of adapting to evolving educational demands and contributing effectively to the institutions' success.

In this study, a questionnaire-based survey method was applied for data collection, utilizing self-administered questionnaires to assess the variables under investigation. This approach was recognized for its cost-effectiveness and extensive reach, enabling the researcher to gather information from a broad range of participants to evaluate multiple variables within the study and test various hypotheses. Additionally, the investigation adopted a cross-sectional design, collecting data from firms at a single time point to achieve the research objectives. A key advantage of the cross-sectional approach was its efficiency and time-saving nature compared to longitudinal studies.

3.4 Research Population and Sampling

This study focused on determining the research population and sampling strategy as foundational steps in its methodology. The research population included specific entities relevant to the study's objectives, from which a subset was sampled. The sampling process was designed to accurately reflect the characteristics of the larger population, enabling the collection of data that was both representative and insightful for analysis. This approach ensured that the findings could be generalized to the broader group under investigation.

3.4.1 Population of the Study

Population referred to the set of elements under consideration for drawing inferences. It was defined as the specific group of individuals, events, or items from which the researcher

aimed to derive outcomes, known as the target population. Sekaran and Bougie (2016) explained that the population encompassed the entire assembly of individuals, events, or items of interest to the researcher, from which they intended to gather insights and formulate conclusions for the study.

The target population of this study comprised all full-time employees (both academic and non-academic) within the PHEIs in Sarawak.

Table 3.1: Number of Academic and Non-Academic Staff

No.	Name of PHEIs	Status	Number of staff
1	University of Technology Sarawak (UTS)	University	356
2	UCSI University, Sarawak Campus	University	60
3	Swinburne University of Technology Sarawak Campus	University	376
4	Curtin University, Malaysia	University	172
5	i-CATS University College	University College	136
6	Sarawak Maritime Academy	College	Not available
7	Methodist Pilley Institute	College	8
8	LimKokWing Institute of Creative Technology, Sarawak Branch	College	Not available
9	Regal City College	College	Not available
10	Riam Institute of Technology	College	Not available
11	Fajar International College	College	Not available
12	FAME International College	College	30
13	i-CATS Miri Branch	College	Not available
14	Cyberjaya College Kuching	College	36
15	Cosmopoint College Kuching	College	Not available
16	Executive College	College	15
17	IBS College	College	Not available
18	I-Systems College Kuching	College	Not available
19	Kolej Laila Taib	College	27
20	MSU College Sarawak	College	Not available
21	SATT College	College	Not available
22	Sedamai College	College	Not available

Table 3.1 continued

23	SEGi College Sarawak	College	Not available
24	SIDMA College Sarawak	College	14
25	Sunway College Kuching	College	Not available
26	Technology College Sarawak	College	Not available
27	Yahos College	College	Not available

Note: Jabatan Pendidikan Tinggi (2024)

According to the Ministry of Higher Education Malaysia (MOHE), 27 PHEIs were registered in Sarawak (refer to Table 3.1). These included 2 universities, 2 branch universities, 1 university college, and 22 colleges. Official information indicated that 11 of these PHEIs provided staff directories, while 16 did not. The total number of academic and non-academic staff recorded was 1,230.

3.4.2 Sample Size

Hair et al. (2022) emphasized the importance of considering the statistical power of estimates when determining the minimum required sample size. Researchers evaluated statistical power by utilizing power tables (Cohen, 1992; Erdfelder et al., 1996) or by conducting power studies using software such as G*Power (Faul et al., 2009). Determining the ideal sample size for a research study involved balancing statistical accuracy with practical constraints like time and budget, in order to minimize sampling errors and ensure robust findings.

In this study, the G*Power tool was employed to calculate the necessary sample size by considering expected effect size, statistical power, and significance level. G*Power was also used to validate the empirical outcomes of the Partial Least Square (PLS) path modeling conducted on complex models (Akter et al., 2011). A priori analysis was conducted based on three key elements influencing statistical power: a significance level (α) of 0.05, the

sample size, and an effect size of 0.15. The use of G*Power 3.1.9.7 facilitated this process, streamlining what traditionally involved the complex use of power charts and tables (Akter et al., 2011). Razali and Wah (2011) articulated that for results to be considered significant, particularly when investigating significant relationships, the statistical tests should have a minimum power of 0.8.

G*Power was utilized for sample size determination due to its user-friendly interface and capability to perform power analyses across various statistical tests. This software facilitates the calculation of required sample sizes by considering factors such as effect size, significance level, and desired statistical power, thereby ensuring robust and reliable research findings (Kang, 2021).

The G*Power analysis presented in Figure 3.1 demonstrated a priori computation of the required sample size for a linear multiple regression model, which involved a fixed model with the R^2 deviation from zero as the statistical test. The key input parameters included an effect size f^2 of 0.15, an alpha error probability (α err prob) set at 0.05, and a desired power level (1-β err prob) of 0.80, with five predictors included in the model.

The output parameters from this analysis indicated a total required sample size of 92 participants to achieve the specified power. This sample size was deemed sufficient to detect the effect with the desired statistical power. Nevertheless, the objective was to achieve a higher sample response rate to obtain more robust findings. By aiming for a larger sample size, the study intended to increase the precision of the estimates and enhance the generalizability of the results, thereby strengthening the validity and reliability of the research outcomes.

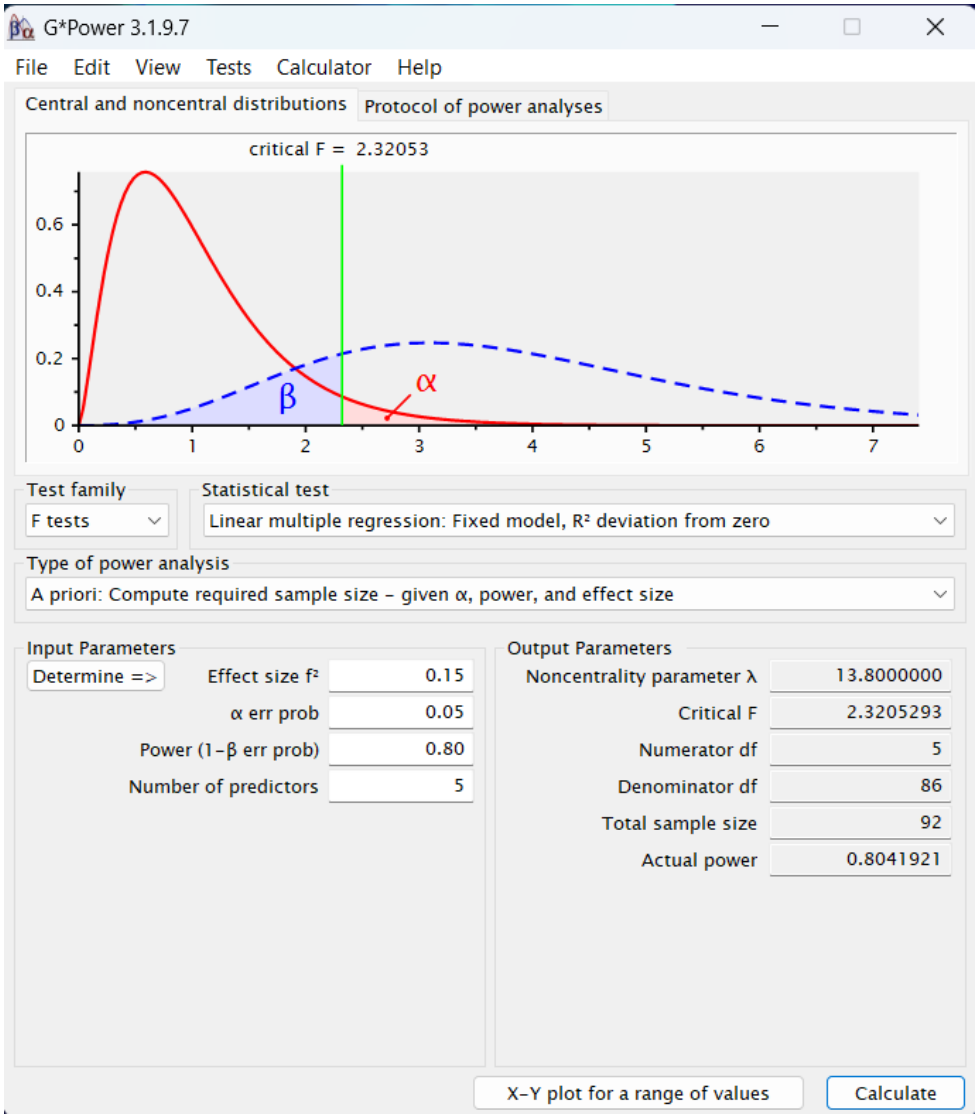


Figure 3.1: G*Power Calculation

In this study, a total of 452 participants were surveyed, exceeding the minimum requirement calculated by G*Power. While G*Power is instrumental in determining the minimum sample size necessary to achieve sufficient statistical power, it does not provide explicit guidelines for maximum sample sizes. However, determining an appropriate maximum sample size is crucial to balance statistical validity with practical considerations. Excessively large samples can lead to the detection of statistically significant differences that are not practically meaningful, potentially overemphasizing trivial effects. Therefore,

researchers should consider factors such as resource availability, ethical considerations, and the diminishing returns of increased precision when determining the upper limit of their sample size (Kang, 2021). This ensures that the study remains both efficient and ethically sound, avoiding unnecessary data collection that does not contribute to meaningful insights.

3.4.3 Sampling Techniques

In this study, purposive sampling, a straightforward method of non-probability sampling, was chosen to ensure that academic and non-academic staff at PHEIs in Sarawak who were most advantageously placed to provide the required information were selected. This technique involved intentionally choosing samples based on specific criteria rather than randomly selecting from the entire population. By employing this method, the study aimed to ensure that the sample included individuals who were most relevant to the research objectives, thereby enhancing the depth and relevance of the data collected.

Purposive sampling was utilized to select respondents who were best positioned to provide the necessary information (Kumar et al., 2013). Two criteria were outlined to identify eligible respondents for this study: (1) the respondent must be working in the institutions in Sarawak, and (2) the respondent must serve as academic or non-academic staff.

3.5 Unit of Analysis

A unit of analysis referred to the subject being studied in the research. It specifically represented what or who was being studied, from which data was collected (Kumar et al., 2013, p. 61). In this study, which assessed the effect of HR practices on employee performance through self-efficacy, the unit of analysis was individual employees, encompassing both academic and non-academic staff. These employees were deemed

capable of providing accurate information that reflected the actual situation within the institution, particularly regarding the study's variables. Therefore, utilizing individuals as the unit of analysis was considered appropriate for evaluating their perceptions of HR practices and self-efficacy in relation to employee performance.

3.6 Questionnaire Design

A structured questionnaire, consisting of 39 closed-ended, multiple-choice questions, was utilized for data collection. The questionnaire was designed to cover six key constructs of the study, along with an additional 8 questions aimed at gathering demographic and company background information. All questions were presented in English. The constructs explored in this study encompassed training and development (TD), job rotation (JR), career planning (CP), job involvement (JI), self-efficacy (SE) acting as the mediator, and employee performance (EP).

The questionnaire was divided into four sections. The first section contained 8 questions focused on demographic details. The second section included 20 items related to assessing training and development (TD), job rotation (JR), career planning (CP), and job involvement (JI). The third section comprised 5 items on self-efficacy (SE) as the mediator. The fourth section included 6 items focused on employee performance (EP).

3.6.1 Demographic Information

Section A of the questionnaire focused on the respondents' demographic information, including the location of the institution, staff category, gender, age, marital status, race/ethnicity, highest education attained, and the number of years with the institution. Respondents were informed that this information would be used solely for analysis purposes. Collecting this data enabled the researcher to explore and summarize the information more

effectively, providing a clearer understanding of the respondents' characteristics and facilitating a more detailed analysis of the study's findings.

3.6.2 Rating Scale

This study employed a 5-point Likert scale to measure the variables, which included training and development, job rotation, career planning, job involvement, self-efficacy, and employee performance. Although 7-point rating scales are often recommended for highly educated samples due to their capacity to understand the additional response complexity, the 5-point Likert scale was selected for this study (Weijters et al., 2010). This choice was due to the diverse educational qualifications of the respondents, ranging from high school to PhD levels, and the inclusion of both academic and non-academic staff.

The 5-point Likert scale ranged from 1 to 5, with each point representing a different level of agreement or disagreement. Specifically, a rating of 1 indicated "Strongly Disagree," 2 indicated "Disagree," 3 indicated "Neutral," 4 represented "Agree," and 5 represented "Strongly Agree." This scale provided a structured framework for respondents to express their opinions or perceptions regarding the various constructs under investigation, ensuring consistency and precision in the measurement of variables throughout the study.

3.6.3 Measurement of Constructs

The research variables in this study included employee performance, training and development, job rotation, career planning, and job involvement as independent variables, with self-efficacy serving as the mediator. The following section details the methods used to measure these primary research variables.

In this study, measurement items were integrated from multiple validated sources to enhance the comprehensiveness and validity of the research instrument (Moana-Filho et al., 2017; Taherdoost, 2016). This approach allows for a more detailed assessment of complex constructs by capturing diverse facets that a single source might not fully encompass. However, it's crucial to ensure that the selected items align theoretically with the research objectives and context. As noted by Correia, combining items from various authors is acceptable, provided there is a clear theoretical justification for their inclusion (Using items from several questionnaires (more than 3 authors) in research instrument consider adaption or developing instrument?, n.d.). By thoughtfully integrating and adapting measurement items from various validated sources, researcher can develop a robust instrument that effectively captures the multifaceted nature of the constructs under investigation, leading to more reliable and insightful research findings.

3.6.3.1 Training and Development

To measure training and development, this study adapted two items were adapted from Abugre and Nasere (2020), two items from Truitt (2011) and one item from Lam et al. (2009). Table 3.2 included five selected and adapted items for training and development, with adjustments made to ensure suitability and relevance.

Table 3.2: Measurement of Training and Development Variable

Variable	Source		Original Items	Code		Items of measurement
Training and Development	Adapted from Abugre & Nasere (2020)	1	Employees generally go through training programs periodically.	TD1	1	I regularly participate in training programs provided by my institution.
		2	My company periodically assesses training effectiveness of employee.	TD2	2	My institution periodically assesses the effectiveness of training programs for employees.
	Adapted from Truitt (2011)	3	Training and development are important for job growth.	TD3	3	Training and development are crucial for academic and professional growth.
		4	Training and development are important for potential advancement.	TD4	4	Training and development are important for career advancement.
	Adapted from Lam et al. (2009)	5	In our company, training programmes are conducted by professionals and experienced managers or trainers.	TD5	5	The training programs are conducted by professionals and experienced trainers.

3.6.3.2 Job Rotation

To measure job rotation, this study adapted items from two researchers with minor modifications to align with the context of the present study. Table 3.3 presented the five adapted items for job rotation, which were adjusted for suitability and relevance. Specifically, two items were adapted from Al-Romeedy (2019) and three items were adapted from Tarus (2014).

Table 3.3: Measurement of Job Rotation Variable

Variable	Source		Original Items	Code		Items of measurement
Job Rotation	Adapted from Al-Romeedy (2019)	1	Job rotation broadens my knowledge and skill in other fields.	JR1	1	Job rotation broadens my knowledge and skills in other fields, contributing to my professional growth in higher education.
		2	I believe job rotation is an excellent system.	JR2	2	Job rotation helps to enhance my performance.
	Adapted from Tarus (2014)	3	I have accumulated a lot of experience through job rotation.	JR3	3	I accumulated a lot of experience through job rotation, which enhances my performance.
		4	I believe job rotation has improved my job stability.	JR4	4	Job rotation improves my job stability and contributes to my professional development.
		5	I am confident that job rotation has achieved effective results in my organization.	JR5	5	Job rotation achieves effective results in my institution, enhancing employee performance.

3.6.3.3 Career Planning

Career planning was measured using items adapted from Amin et al. (2014) and Zakaria et al. (2022). Table 3.4 presented five of these adapted items for career planning, with adjustments made to ensure suitability and relevance. Specifically, two items were adapted from Zakaria et al. (2022) and three items were adapted from Amin et al. (2014).

Table 3.4: Measurement of Career Planning Variable

Variable	Source		Original Items	Code		Items of measurement
Career Planning	Adapted from Zakaria et al. (2022)	1	I am currently on a career path within the organization that is in line with my aspirations.	CP1	1	I have a clear career path within the institution that aligns with my aspirations.
		2	I have set key goals for my development areas in the short term (next 12-month period).	CP2	2	I have set key goals for my development areas in the short term (next 12-month period), which helps improve my performance.
	Adapted from Amin et al. (2014)	3	Prefers an internal employee when vacancy occurs.	CP3	3	My institution prefers to promote internal employees when a vacancy occurs.
		4	Promotion is done based on merit.	CP4	4	My institution promotes staff based on merit, enhancing my self-efficacy to perform at my best.
		5	My personal and organizational growth needs are matched.	CP5	5	My personal growth needs are aligned with the institution's growth needs, contributing to my overall performance.

3.6.3.4 Job Involvement

To measure job involvement, this study adapted two items of perceived job involvement from Kundu et al. (2019) and three items from Mikkelsen & Olsen (2019). Table 3.5 included these five adapted items, with adjustments made to ensure suitability and relevance.

Table 3.5: Measurement of Job Involvement Variable

Variable	Source		Original Items	Code		Items of measurement
Job Involvement	Adapted from Kundu et al. (2019)	1	The most important things that happen to me involve this job.	JI1	1	The most important things that happen to me involve my work.
		2	I am very much personally involved with this job.	JI2	2	I am very much involved personally in my work.
	Adapted from Mikkelsen & Olsen (2019)	3	In my department, we work together to influence the standards that constitute good work.	JI3	3	In my department, we collaborate to establish the standards that define quality work.
		4	In my department, we often have the opportunity to influence goals or actions.	JI4	4	I have the opportunity to influence the department's goals or actions.
		5	All employees in my department are involved in important decisions that affect them.	JI5	5	All members of my department are involved in important decisions that impact them.

3.6.3.5 Self-Efficacy

To measure job involvement, this study adapted three items of self-efficacy from Na-Nan et al. (2019) and two items from De Clercq et al. (2019). Table 3.6 included these five adapted items, which were adjusted to ensure suitability and relevance.

Table 3.6: Measurement of Self-Efficacy Variable

Variable	Source		Original Items	Code		Items of measurement
Self-Efficacy	Adapted from Na-Nan et al. (2019)	1	I have capability suitable for the assigned responsibility.	SE1	1	I have the capability suitable for my assigned responsibilities.
		2	I am confident that my capabilities are equal to my co-workers and will exceed them in the future.	SE2	2	I am confident that my capabilities are equal to those of my colleagues and will surpass them in the future.

Table 3.6 continued

		3	I can manage difficult tasks or challenges well.	SE3	3	I can manage difficult tasks or challenges effectively.
	Adapted from De Clercq et al (2019)	4	I feel confident contributing to discussions about the organization's strategy.	SE4	4	I am confident contributing to discussions about the institution's strategy.
		5	I feel confident helping to set targets/goals in my work area.	SE5	5	I am confident helping to set targets and goals in my department.

3.6.3.6 Employee Performance

Task performance, contextual performance, and adaptable performance were all included in the composite measure used in this study to evaluate employee performance. Each of these performance dimensions—task performance, contextual performance, and adaptive performance—was assessed using two items adapted from Koopmans et al. (2013), as Table 3.7 shows.

Table 3.7: Measurement of Employee Performance Variable

Variable	Source	Original Items	Code	Items of measurement
Employee performance	Adapted from Koopmans et al. (2013)	I managed to plan my work so that it was done on time.	EP1	I effectively plan my tasks to ensure they are completed on time.
		I worked towards the end result of my work.	EP2	I focus on achieving the desired outcomes of my work.
		I took the initiative when there was a problem to be solved.	EP3	I take the initiative to solve problems as they arise.
		I took on challenging work tasks, when available.	EP4	I embrace challenging work tasks when they are available.
		I was able to cope well with difficult situations and setbacks at work.	EP5	I am able to cope well with difficult situations and setbacks at work.

Table 3.7 continued

	I was able to cope well with uncertain and unpredictable situations at work.	EP6	I am able to cope well with uncertain and unpredictive situations at work.

3.7 Preliminary Test Study

A preliminary test (pre-test) in research served as a crucial step in the research process (van Teijlingen & Hundley, 2002). The purpose of pre-testing was to ensure high data quality and minimize or prevent the need for item deletion during the evaluation of the measurement model (Memon et al., 2017). This was essential for minimizing errors that could compromise the validity and reliability of the research findings. The pre-test aimed to enhance the clarity, interpretation, and technical accuracy of the questionnaire items, effectively reducing ambiguity and ensuring that questions were understood as intended. Through this iterative process, necessary adjustments to the instrument were made, thereby increasing the likelihood of obtaining accurate and meaningful data from the larger, subsequent study.

Kumar et al. (2013) emphasized that pre-testing a questionnaire was crucial for verifying several key aspects: a) the appropriateness of question wording, b) the logical order of questions, c) the clarity with which respondents comprehended the questions, d) the necessity to add or remove certain questions, and e) the clarity and sufficiency of the instructions. They argued that all scales or items, whether adapted or adopted, needed to undergo pre-testing to ensure their effectiveness and accuracy when applied to a different context or with a new group of respondents. In this study, the pre-test was conducted using expert evaluation and cognitive interviewing to ensure the robustness of the questionnaire.

3.7.1 Expert Evaluation

In this study, to ensure the content validity of the instrument, the questionnaire was reviewed by two senior academicians with doctorate qualifications before being used in the actual survey. These experts were asked to evaluate the questionnaire items and provide feedback on aspects such as language, wording, format, clarity, simplicity, and ambiguity (Yaghmaie, 2003). Based on their feedback, necessary improvements were made to enhance the face validity of the questionnaire. All experts were requested to comment on multiple elements, such as the appropriateness of the scale used, the accuracy of instructions provided, the clarity or uncertainty of construct definitions, and the representation of items. Ultimately, the pre-testing process assessed the designed questionnaire for content validity.

3.7.2 Cognitive Interviewing

Furthermore, a cognitive interview method was conducted among the actual respondents in this study. Cognitive interview, a common semi-structured in-depth interview technique, were used to explore respondents' thought processes when answering survey questions, serving as a valuable pre-testing method (Neuert & Lenzner, 2016). These interviews were conducted face-to-face with a small, purposive sample of five respondents, which aligns with the guidelines suggested by Willis (2004). Through these interviews, a semi-structured in-depth approach was employed to assess participants' reflections on the survey questionnaires.

In this study, three academic staff members and two administrative staff members, selected from different backgrounds and age groups, were chosen to evaluate the questionnaire. Each survey item was carefully examined during this process. Feedback from the respondents was collected during the cognitive interviews, and necessary amendments

were made accordingly. This sample size is considered sufficient, as data saturation was reached, with no new insights arising from further interviews. Reaching data saturation ensures that the questionnaire items are thoroughly evaluated, enhancing the reliability and validity of the survey instrument (Presser et al., 2004).

The pre-test results were presented in Table 3.8. All feedback from the respondents was considered, and the questions were amended accordingly. The final version of the questionnaire was revised and approved by the supervisor to ensure the reliability and validity of the items for actual data collection, as outlined in Tables 3.2 to 3.7.

Table 3.8: Outcomes of Pre-Test

Code	Original Questions	R1	R2	R3	R4	R5	Comments/Changes Made
TD1	Employees typically participate in training programs periodically.	Agree	Agree	Employees participate in training programs periodically.	Agree	Agree	Amended accordingly.
TD2	My institution regularly assesses the effectiveness of employee training.	Agree	My institution periodically assesses the effectiveness of training programs.	Agree	Agree	Agree	Amended accordingly.
JR1	Job rotation broadens my knowledge and skills in other academic areas.	Agree	Agree	Job rotation broadens my academic and administrative knowledge and skills.	Agree	Agree	Amended accordingly.
CP3	The institution prefers internal candidates when vacancies arise.	My institution prefers internal candidates' promotion when vacancies arise.	Agree	Agree	Agree	Agree	Amended accordingly.
JI2	I am deeply personally involved with this role.	Agree	Agree	Agree	Agree	I am personally engaged in this role.	Amended accordingly.

Table 3.8 continued

SE5	I feel confident helping to set targets and goals.	Agree	Agree	Agree	I feel confident helping to set targets and goals in my organization.	Agree	Amended accordingly.
EP6	I handled uncertain and unpredictable situations at work effectively.	I can cope with uncertain and unpredictable situations at work effectively.	Agree	Agree	Agree	Agree	Amended accordingly.

Note: R1=Respondent 1, R2=Respondent 2, R3=Respondent 3, R4=Respondent 4, R5=Respondent 5, TD=Training and Development, JR=Job Rotation, CP=Career Planning, JI=Job Involvement, SE=Self-Efficacy, EP=Employee Performance

3.8 Methods of Data Collection

This study adopted a cross-sectional design, involving data collection at a single point in time for a specific analysis. The respondents were drawn from all academic and non-academic staff within 27 PHEIs in Sarawak. Sekaran and Bougie (2016) defined a cross-sectional study as one conducted over a distinct time frame, with data collection occurring on a single occasion. This research utilized a survey approach, selected for its capacity to facilitate rapid and efficient data collection. Questionnaires were disseminated to participants online by the researcher.

The online survey for this research was conducted using the Google Form platform. The survey link was distributed via emails to chief executives and human resource departments, followed by a courtesy call to the person in charge to explain the purpose of the academic survey and encourage participation. To ensure that the survey targeted the appropriate respondents, two preliminary questions were designated as mandatory fields: the location of the institution and the staff category (academic or non-academic). Respondents were required to provide this information before proceeding to the remaining items in the questionnaire. Implementing mandatory questions is a common practice in survey design to guarantee the collection of essential data and to ensure that subsequent questions are relevant to the respondent's context.

The Google Form link was also shared in the Sarawak Association of Private Institutions of Higher Education (Perintis) WhatsApp group chat, which included all chief executives or principals of PHEIs in Sarawak. The use of an online survey offered several advantages, including convenience, user-friendliness, cost-effectiveness, environmental sustainability (paperless), and the ability to reach a wider geographical area across Sarawak.

The data collection process was completed within three weeks, from 9 July to 30 July 2024, resulting in a total of 452 responses for analysis.

3.9 Data Analysis Techniques

The data collected for this study were analyzed using Partial Least Square (PLS)-Structural Equation Modeling (SEM) and the Statistical Package for Social Science (SPSS). SPSS was utilized to conduct descriptive statistical analyses, including the calculation of percentages, means, modes, and the standard deviation for the variables under investigation. To examine the relationships between HR practices and employee performance at PHEIs, as well as to assess the mediating role of self-efficacy, PLS-SEM technique was employed.

Due the relative complexity of the research model, which includes both direct and mediating effects, could be used to justify the use of PLS-SEM. This is consistent with Hair et al. (2013) suggestion that PLS be used in a complex research setting. Furthermore, unlike SPSS, which can only perform moderating effects through hierarchical regression using multiple models, PLS-SEM allows the analysis of both direct and moderating effects in a single research model and one running. This is due to the fact that SEM makes feasible to evaluate predictive relevance, moderating effect, and significance path coefficients. The primary analysis for PLS-SEM is divided into two parts: the assessment of the measurement model and the assessment of the structural model.

These analyses included:

1. Data screening and preliminary analysis
2. Descriptive statistics
3. Reliability of research instrument

4. Harman's single factor test
5. Assessment of measurement model (reflective)
6. Assessment of structural model

3.9.1 Data Screening and Preliminary Analysis

Data screening was conducted as a foundational step in this quantitative research to ensure the accuracy and validity of the subsequent analysis. The process began with the identification and treatment of missing data, a common occurrence in survey-based studies, where respondents may leave certain questions unanswered (Hair et al., 2018). Following this, the normality of the data, a critical assumption in multivariate analysis, was assessed using skewness and kurtosis metrics, with Mardia's multivariate kurtosis applied to further validate the distribution of the data (Hair et al., 2010; Pallant, 2011). Additionally, the potential issue of multicollinearity, where independent variables exhibit high correlations, was evaluated by examining the Variance Inflation Factor (VIF) and tolerance values, with VIF values exceeding 5 or tolerance values below 0.20 serving as indicators of problematic multicollinearity (Hair et al., 2017). Through this comprehensive data screening process, the study ensured that the data was suitable for robust multivariate analysis, thereby enhancing the reliability and validity of the research findings.

3.9.2 Descriptive Statistics

Descriptive analysis played a central role in this research, serving as a foundational component for high-quality causal analysis (Loeb et al., 2017). This method involved statistically summarizing and organizing the collected data to provide a clear understanding of its characteristics without extending inferences beyond the data. The primary goal was to organize, summarize, and present the data in an informative manner. The analysis also

included examining frequency distributions and percentages to outline the prevalence of different categories or responses in Section A.

3.9.3 Reliability of Research Instrument

To achieve a reliable measurement, this research strictly adhered to established practices and standards in research methodology. The reliability analysis was conducted to verify the consistency with which the items within each construct accurately measured the intended concept. The reliability of a measurement indicated the extent to which it was free from error, thereby confirming the stability of the measurement over time, across various items within the construct, and ensuring the generalizability of the findings (Sekaran & Bougie, 2016). To address potential reliability issues, this study employed measurement constructs from previous research, either adopted or adapted based on their demonstrated Cronbach's Alpha values. Hair et al. (2021) emphasized that the use of previously validated instruments was advantageous, as their internal consistency reliability, measured by Cronbach's Alpha, aligned with the accepted thresholds for composite reliability.

Consequently, a Cronbach's Alpha threshold of 0.7 was established as the acceptable level of consistency for empirical research, with values closer to 1 indicating higher reliability in terms of internal consistency (Bond & Fox, 2013). Therefore, a reliability analysis was conducted for all variables within the research instrument to ensure adherence to this criterion. Table 3.9 presented the Cronbach's Alpha Value Interpretation.

Table 3.9: Cronbach's Alpha Value Interpretation Table

Cronbach's alpha value	Interpretation
0.80 till 1.00	Very good and High level of internal consistency
0.70 till 0.79	Good and acceptable level of internal consistency
0.60 till 0.69	Acceptable
<0.60	Item needs repair
<0.50	Item need to be dropped

Note: Bond & Fox (2013)

3.9.4 Harman's Single Factor Test

Additionally, Harman's single factor test was applied in this study to avoid common method variance (CMV) (Hair et al., 2022). To address the potential for CMV in this study, both procedural remedies prior to data collection and statistical tests post-data collection were implemented. Harman's single-factor test, a widely recognized method for detecting CMV, was utilized. This test involved a principal component analysis to determine if a single factor accounted for the majority of variance among the variables.

3.9.5 Assessment of Measurement Model (Reflective)

In PLS-SEM, a measurement model defined the relationship between latent variables and their observed indicators. The primary objective of the measurement model was to establish the construct validity of the latent variables by evaluating the reliability and validity of the indicators used for measurement (Hair et al., 2022).

3.9.5.1 Indicator Reliability (Outer Loading)

Urbach and Ahlemann (2010) asserted that if an indicator accurately measures what it is intended to measure, it can be considered reliable. Indicator reliability was tested in this study to assess the consistency of the indicators with their intended measurements (Urbach & Ahlemann, 2010). A cut-off value of 0.5 was applied to determine the significance of each

indicator (Hair et al., 2010). Loading values of 0.5 or higher were deemed acceptable, particularly if the sum of these loadings resulted in high scores that contributed to Average Variance Extracted (AVE) scores exceeding 0.5 (Byrne, 2016).

3.9.5.2 Convergent Validity

Convergent validity was typically assessed using the AVE. Fornell and Larcker (1981) emphasized that for convergent validity to be achieved in PLS, the AVE of a construct should be at least 0.5. Urbach and Ahlemann (2010) noted that convergent validity involved taking two measures intended to assess the same construct and demonstrating that they were related.

3.9.5.3 Discriminant Validity

Discriminant validity was confirmed using several key criteria. First, the Fornell and Larcker criterion was applied, ensuring that the square root of the AVE for each construct exceeded its correlations with other constructs, thereby affirming that the constructs were distinct and measured different concepts, as outlined by Fornell and Larcker (1981). Additionally, cross-loadings were examined to further establish discriminant validity, revealing that the loadings of each indicator were higher on their respective constructs than on any other constructs, with values generally exceeding the recommended threshold of 0.7. This indicated that the items effectively measured their intended constructs without significant overlap with others in the model. Furthermore, the Heterotrait-Monotrait Ratio (HTMT) criterion was employed as a more rigorous assessment, with values below the 0.90 threshold, as suggested by Gold et al. (2001), confirming discriminant validity. For a more conservative assessment, a threshold of 0.85 was also applied, as recommended by Kline (2011), and constructs meeting these criteria were deemed to have satisfactory discriminant validity.

A summary of the guidelines for assessing measurement model validity is provided in Table 3.10.

Table 3.10: Summaries of Indices for Measurement Analysis

No.	Assessment	Name of Index	Guidelines
1	Internal Consistency	Composite Reliability (CR)	CR >0.9 (Not Desirable) CR>0.7-0.9 (Satisfactory) CR>0.6 (for exploratory research)
2	Indicator Reliability/Factor Loadings	Indicator Loadings	Loading 0.708 or higher is recommended, but loadings >0.7, 0.6, 0.5 or 0.4 is adequate if other items higher loadings to complement the AVE and CR
3	Convergent Validity	Average Variance Extracted (AVE)	AVE >0.50
4	Discriminant Validity	HTMT Criterion	HTMT 0.85 (Stringent Criterion) HTMT 0.90 (Conservative Criterion) HTMT inference using bootstratpping technique (Henseler et al, 2015): Does 90% bootstrap confidence interval of HTMT include the value -1<HTMT<1 (Liberal Criterion)

Note: Ramayah et al. (2018)

3.9.6 Assessment of Structural Model

The assessment of the structural model was a critical step in evaluating the relationships among latent constructs in PLS-SEM. This process involved examining the hypothesized paths between constructs to determine the strength, direction, and significance of these relationships. The structural model assessment provided insights into the predictive power of the model and the extent to which the independent variables influenced the dependent variables. Key aspects of this evaluation included testing for collinearity issues, assessing the significance and relevance of the path coefficients, examining the model's explanatory power through R^2 values, assessment the level of effect size (f2) and evaluating the predictive relevance using Q^2 values. This comprehensive assessment ensured that the

theoretical framework was accurately represented and that the model effectively explained the observed data.

3.9.6.1 Assessment of the Structural Model for Collinearity Issues

In this study, the assessment of collinearity was crucial to ensure the reliability of the structural model. Collinearity, which occurs when predictor variables are highly correlated, can lead to inflated variances of the estimated coefficients, compromising the model's validity. Following the guidelines provided by Hair et al. (2011), a VIF value of 5 or higher typically indicates potential collinearity issues, while Diamantopoulos and Siguaw (2006) suggested a more conservative threshold of 3.3. Therefore, in this research, the researcher aimed for a VIF value of 3 and lower to confirm that collinearity did not significantly impact the structural model, thereby ensuring the stability and reliability of the results.

3.9.6.2 Assessing the Significance and Relevance of the Structural Model Relationships

The significance and relevance of the structural model relationships in this study were assessed using a bootstrapping procedure at a 0.05 significance level. Following the guidelines provided by Ramayah et al. (2018), the critical values for a one-tailed test were established as 2.33 at the 1 percent significance level ($\alpha = 0.01$), 1.645 at the 5 percent significance level ($\alpha = 0.05$), and 1.28 at the 10 percent significance level ($\alpha = 0.1$). Additionally, the estimated path coefficients were interpreted according to their proximity to 0 or +1, with weaker relationships correlating with values close to 0 and strong positive relationships correlating with values close to +1, as suggested by Hair et al. (2017).

3.9.6.3 Assessment the Level of R^2 (Coefficient of Determination)

The coefficient of determination (R^2) was used to assess the explanatory power of the structural model in this study. R^2 values indicate the proportion of variance in the

dependent variable that is explained by the independent variables in the model. R^2 values should be high enough for the model to achieve a minimum level of explanatory power (Urbach & Ahlemann, 2010). In this study, the R^2 values were evaluated following the guideline that R^2 values of 0.75, 0.50, and 0.25 can be considered substantial, moderate, and weak, respectively (Hair et al., 2017). These R^2 values were calculated to determine how well the HR practices, mediated by self-efficacy, explained variations in employee performance.

3.9.6.4 Assessment the Level of Effect Size (f^2)

In assessing the impact of predictor variables on the dependent variable within the structural model, effect size (f^2) played a crucial role. Cohen (1988) provided a framework for interpreting f^2 values, where 0.35, 0.15, and 0.02 corresponded to large, medium, and small effects, respectively. This study calculated the effect sizes to determine the relative influence of HR practices on employee performance, with self-efficacy acting as a mediator. By analyzing these effect sizes, the research ensured that even small yet significant effects were recognized and appropriately addressed in the overall analysis.

3.9.6.5 Assessment of the Predictive Relevance (Q^2)

The assessment of predictive relevance (Q^2) was conducted to evaluate the model's ability to predict the dependent variables. Following the guidelines provided by Hair et al. (2017), a Q^2 value larger than 0 indicated that the exogenous constructs possessed predictive relevance for the endogenous constructs. This study calculated Q^2 using the blindfolding procedure, ensuring that the model demonstrated sufficient predictive accuracy and relevance in predicting the outcomes related to employee performance. The presence of positive Q^2 values confirmed that the model was adequately specified and had the capability to predict the endogenous variables effectively.

3.9.6.6 Assessment of Mediation Analysis

The assessment of mediation analysis was conducted to evaluate the mediating role of self-efficacy in the relationship between HR practices and employee performance. Initially, the direct relationships between the independent variables and employee performance were examined without the inclusion of the mediator. Subsequently, self-efficacy was incorporated into the model as a mediator to assess its impact on the relationships. The analysis aimed to determine whether self-efficacy significantly mediated the effects of HR practices on employee performance, thereby clarifying the mechanisms through which these practices influenced outcomes.

The significance of both direct and indirect effects was tested using bootstrapping procedures, with bias-corrected confidence intervals at the 95% level. The results were deemed significant if the t-value exceeded 1.96, and the p-value was less than 0.05, indicating that the indirect effects were statistically significant. The 95% bootstrapped confidence intervals further confirmed the mediation pathways, providing a robust and reliable method for evaluating the mediation effects while accounting for potential biases in the estimation process. This rigorous approach ensured that the findings accurately reflected the mediating role of self-efficacy in the model.

3.10 Chapter Summary

This chapter outlined the research methodology utilized in the study, describing it as a descriptive survey-based investigation. It detailed the data collection methods and analytical techniques employed. Furthermore, it provided insights into the chosen target population, the sampling frame, and the rationale behind selecting the unit of analysis, which included all academic and non-academic staff at PHEIs in Sarawak as respondents.

Additionally, the chapter clarified the choice of instruments used, relying on pertinent literature reviews. The analysis of the data, along with the findings, results, and discussion relevant to this study, will be presented in Chapter 4.

CHAPTER 4

DATA ANALYSIS AND RESULTS

4.1 Introduction

This chapter provided a comprehensive report of the results obtained from data analysis using Structural Equation Modelling (SEM) and Smart PLS software. It included preliminary data screening, response rates, and descriptions of the study sample. The outcomes of the measurement and structural models were further discussed in the chapter. Assessments of the measurement model's discriminant validity, internal consistency, and individual item reliabilities were provided. The structural model also covered the relationships among the three main study constructs: employee performance, self-efficacy, and HR practices.

4.2 Response Rate

A total of 452 responses were collected from the distribution of online questionnaires over three weeks, from 9 July to 30 July 2024. The questionnaires were distributed via Google Forms and shared through emails to institutions, as well as through WhatsApp within the Perintis group and various social media platforms. This comprehensive approach ensured a wide reach and effective response collection. The response rate was high, reflecting the participants' engagement and the efficacy of the distribution methods employed.

The G*Power analysis recommended a minimum sample size of 92 to achieve sufficient statistical power for the study's analyses. Collecting 452 responses not only surpasses this minimum requirement but also enhances the robustness of the statistical analyses. Larger sample sizes improve the accuracy of parameter estimates, increase the

reliability of the results, and allow for more precise detection of effect sizes, thereby strengthening the overall validity of the study's findings.

4.3 Data Screening and Preliminary Analysis

Data screening was a critical step in this quantitative research, serving as the foundation for achieving meaningful results. According to Hair et al. (2010), the quality of data output and analysis was heavily reliant on thorough preliminary data screening. This process enabled researchers to identify potential violations of key assumptions required for applying multivariate data analysis techniques (Hair et al., 2007).

Prior to initiating the actual data screening, the researcher coded all 452 questionnaires according to the constructs they represented. For example, training and development was coded as TD, and since it comprised 5 items, these items were labeled TD1 to TD5. Employee performance was coded as EP, with its 6 items labeled from EP1 to EP6. Similarly, other constructs and their respective items were coded accordingly. Table 4.1 presented the codes and the number of items for each variable.

Table 4.1: Constructs / Items Coding

Constructs	Code	No of Items
Training and Development	TD	5
Job Rotation	JR	5
Career Planning	CP	5
Job Involvement	JI	5
Self-Efficacy	SE	5
Employee Performance	EP	6
Total number of items		**31**

Table 4.1 shows that the total number of items across all variables in this study is 31. The researcher conducted the following methods in this study: analysis of missing values,

normality testing, and multicollinearity assessment (Hair et al., 2010; Tabachnick & Fidell, 2013).

4.3.1 Missing Data Screening

One common issue in research surveys is the occurrence of missing data. This refers to instances where certain information is unavailable for a subject, despite other data being present, typically due to a respondent not answering one or more questions in the survey (Hair et al., 2018).

The missing data screening was conducted to ensure the completeness of the collected data for this research. For the responses obtained via the online survey, the Google Form questionnaire was designed with an endorsement system that required respondents to answer all questions in each section before proceeding to the next section. This system effectively prevented missing data from incomplete questionnaires. According to the frequency tables output generated from SPSS, no missing data was reported (refer Table 4.2).

Table 4.2: The Sources of Survey Respondents Received

		Location of Institution	Staff Category	Gender	Age	Marital Status	Race/ Ethnicity	Highest Education Attained	Number of Years with Present Institution
N	Valid	452	452	452	452	452	452	452	452
	Missing	0	0	0	0	0	0	0	0

4.3.2 Straight Lining

This study also examined the response patterns to detect any instances of straight lining, which occurs when a participant provides identical responses to most of the questions (Hair et al., 2017). The assessment for straight lining was conducted using Microsoft Excel. Among the 452 cases tested, none exhibited straight lining, and therefore, all responses were included in the subsequent analysis.

4.3.3 Normality Test

Normality was a fundamental assumption in the multivariate analysis conducted in this study. It referred to the distribution of data forming a symmetrical, bell-shaped curve for individual metric variables, consistent with the normal distribution (Hair et al., 2010; Pallant, 2011).

In general, a balanced data distribution was regarded as normal. When there was an unbalance in the data distribution, there was skewness to the left or right. Large values tailing off to the right in a positively skewed distribution was represented by a right skew, whereas small values tailing off to the left in a negatively skewed distribution was shown by a left skew. According to Hair et al. (2017), skewness levels ought to be between -1 and +1 in order to be deemed acceptable.

Kurtosis was applied to quantify the data distribution's peak or flatness. A peaked distribution was indicated by a positive kurtosis value, whereas a flat distribution was indicated by a negative value. According to Hair et al. (2017), the accepted range for determining normality was ±2.58 at a significance level of 0.01 or ±1.96 at a significance level of 0.05.

However, Kim (2013) suggested that for sample sizes greater than 300, reliance on the histogram and absolute values of skewness and kurtosis was advisable, regardless of the z value. An absolute skew value greater than 2 or an absolute kurtosis greater than 7 was recommended as a reference point to identify substantial non-normality (Finney & DiStefano, 2013).

In this study, skewness and kurtosis were employed to evaluate normality, and Mardia's multivariate kurtosis was assessed using the WebPower tool. Hair et al. (2017) recommended the use of such tools to measure multivariate skewness and kurtosis effectively. The results obtained from WebPower provided a comprehensive assessment of the data's normality:

https://webpower.psychstat.org/models/kurtosis/results.php?url=5efa0e69f7027b01d452584d67e8c3c0

Based on the WebPower output, the skewness and kurtosis coefficients for each variable were presented in Table 4.3.

Table 4.3: The Skewness and Kurtosis Coefficient for Normality Verification

Sample size: 452						
Number of variables: 6						
Univariate skewness and kurtosis						
	Skewness	SE_skew	Z_skew	Kurtosis	SE_kurt	Z_kurt
CP	-2.784	0.115	-24.240	14.006	0.229	61.117
EP	-3.204	0.115	-27.898	18.355	0.229	80.095
JI	-2.452	0.115	-21.361	12.216	0.229	53.303
JR	-1.800	0.115	-15.676	8.232	0.229	35.923
SE	-2.937	0.115	-25.578	18.415	0.229	80.356
TD	-2.418	0.115	- 21.055	14.175	0.229	61.855
Mardia's multivariate skewness and kurtosis						
	b	z	p-value			
Skewness	43.95517	3311.2897	0			
Kurtosis	150.17820	110.8567	0			

The results indicated that the data was not normally distributed, as shown by the skewness (β = 43.95517, p< 0.01) and kurtosis (β = 150.17820, p< 0.01). The findings of this study demonstrated that all tests produced consistent results, confirming that the normal distribution assumption of the data was violated. This necessitated the use of Smart PLS, a non-parametric analysis tool.

4.3.4 Multicollinearity Test

Multicollinearity occurred when two or more independent variables (exogenous latent constructs) in a statistical model were highly correlated with each other (Field, 2015; Hair et al., 2020). This condition caused instability and unreliability in the estimates of regression coefficients, leading to potential inaccuracies in the model's interpretation (Hair et al., 2007). Multicollinearity among the variables increased the standard errors, which in turn caused the coefficients to become statistically non-significant (Tabachnick and Fidell, 2013). This study evaluated the correlation coefficients and the Variance Inflation Factor (VIF) values to determine if multicollinearity was present.

Table 4.4: Correlation Matrix of the Independent Variables

	EP	**TD**	**JR**	**CP**	**JI**	**SE**
EP	1					
TD	0.666	1				
JR	0.544	0.520	1			
CP	0.606	0.628	0.456	1		
JI	0.657	0.639	0.469	0.644	1	
SE	0.754	0.638	0.531	0.603	0.654	1

Note: **Correlation is significant at the 0.01 level (2-tailed); EP= Employee Performance; TD= Training & Development; JR= Job Rotation; CP= Career Planning; JI= Job Involvement; SE= Self-Efficacy; n=452

The correlation coefficients between the independent variables in this study indicated the degree of linear association between them. As shown in the correlation matrix in Table

4.4, the highest correlation observed was between EP and SE, with a correlation coefficient of 0.754. All other correlation coefficients among the independent variables ranged from 0.456 to 0.754, which were less than the common threshold of 0.90, suggesting that multicollinearity was unlikely to be a serious issue (Hair et al., 2010). Generally, a correlation coefficient exceeding 0.90 is considered indicative of severe multicollinearity (Tabachnick & Fidell, 2007). Therefore, based on the correlation coefficients, multicollinearity did not appear to be a concern in this study.

To further confirm the absence of multicollinearity, the study examined the VIF values, which measured the extent to which the variance of an estimated regression coefficient was inflated due to multicollinearity. A common rule of thumb is that a VIF value exceeding 5 indicates a problematic level of multicollinearity (Hair et al., 2011). In this context, Hair et al. (2017) asserted that multicollinearity is indicated when the VIF value of a construct exceeds 5 or when the tolerance value falls below 0.20. According to Diamantopoulos and Siguaw (2006), if VIF is 3.3 or higher, it indicates a potential collinearity problem.

In this analysis, the VIF values for all the independent variables ranged from 1.532 to 2.269, which were below the threshold of 5 (refer Table 4.5). The tolerance values ranged from 0.441 to 0.653, which were below the threshold of 3.3. This further supported the conclusion that multicollinearity was not a significant issue in this study.

Table 4.5: Results of Multicollinearity Test

Model	Collinearity Statistics Tolerance	VIF
Constant (EP)		
TD	0.448	2.231
JR	0.653	1.532
CP	0.482	2.076
JI	0.441	2.269
SE	0.446	2.242

Note: Tolerance > 0.2 and VIF value < 5; EP= Employee Performance; TD= Training & Development; JR= Job Rotation; CP= Career Planning; JI= Job Involvement; SE= Self-Efficacy; n=452

Overall, both the correlation coefficients and VIF values indicated that multicollinearity was not a concern in the current analysis. The independent variables did not exhibit excessive linearity, ensuring that the regression coefficients were reliable and the statistical inferences drawn from the model were robust. This allowed for greater confidence in the results of the regression analysis.

4.4 Common Method Variance

In research where data was collected from a single source, the issue of common method variance (CMV) became a particular concern. CMV occurred when the variance observed in the data was attributed not to the underlying constructs being measured but rather to the measurement method itself (Richardson et al., 2009). This introduced systematic bias into the study, potentially inflating or deflating the relationships between variables and threatening the overall validity of the findings. In studies where both predictor and criterion variables were obtained from the same person, such as in self-administered questionnaires, the risk of CMV was crucial (Podsakoff et al., 2003). CMV threatened the validity of the constructs and created systematic bias in a study (Tehseen et al., 2017). Recognizing this

risk, researchers employed a combination of procedural and statistical remedies to mitigate the impact of CMV on their results.

To address the potential for CMV in this study, both procedural remedies before data collection and statistical tests after data collection were employed. One of the key statistical methods used was Harman's single-factor test, a widely recognized approach for detecting CMV. This test involved conducting a principal component analysis to determine whether a single factor accounted for the majority of the variance among the variables. In this study, the analysis identified 31 distinct factors that together accounted for 39.806% of the total variance (refer to Table 4.6). The analysis results indicated that no single factor accounted for the majority of covariance between these variables. This result was significant because it fell below the 50% threshold commonly used to indicate substantial CMV (Podsakoff et al., 2003).

Table 4.6: Harman's Single-factor Test (Total Variance Explained)

	Initial Eigenvalues			**Extraction Sums of Squared Loadings**		
Component	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	12.340	39.806	39.806	12.340	39.806	39.806
2	2.032	6.554	46.359			
3	1.580	5.096	51.455			
4	1.228	3.962	55.417			
5	1.088	3.511	58.928			
6	1.005	3.241	62.169			
7	0.858	2.769	64.938			
8	0.829	2.674	67.612			
9	0.732	2.363	69.975			
10	0.653	2.106	72.081			
11	0.619	1.998	74.079			
12	0.604	1.948	76.027			
13	0.570	1.840	77.867			
14	0.536	1.731	79.597			

Table 4.6 continued

15	0.529	1.706	81.303
16	0.501	1.615	82.918
17	0.492	1.588	84.506
18	0.468	1.510	86.016
19	0.441	1.423	87.439
20	0.415	1.339	88.778
21	0.399	1.287	90.066
22	0.377	1.218	91.283
23	0.363	1.169	92.452
24	0.345	1.112	93.564
25	0.342	1.104	94.669
26	0.326	1.050	95.719
27	0.301	0.970	96.689
28	0.282	0.911	97.600
29	0.266	0.859	98.460
30	0.247	0.798	99.257
31	0.230	0.743	100.000

Note: Extraction Method: Principal Component Analysis.

In this study, the results from Harman's test supported the conclusion that CMV did not pose a significant threat to the validity of the research findings. Therefore, it can be concluded that CMV was not a major issue in this study.

4.5 Respondents Profile

The respondents' profile provides an in-depth overview of the demographic characteristics of the participants involved in the study. This section outlines the key demographic factors, including the location of the institution, staff category, gender, age, marital status, race/ethnicity, highest education attained, and the number of years with the present institution (refer to Table 4.7). Understanding these characteristics is crucial for contextualizing the findings of the study and ensuring that the sample is representative of the broader population under investigation.

Table 4.7: Respondents' Profile

Demographic Profile	Category	Frequency (n=452)	Percentage (%)
Location of Institution	Bintulu	15	3.3
	Kuching	248	54.9
	Miri	105	23.2
	Sibu	84	18.6
	Total	452	100.0
Staff Category	Academic Staff	299	66.2
	Non-Academic Staff	153	33.8
	Total	452	100.0
Gender	Female	240	53.1
	Male	212	46.9
	Total	452	100.0
Age	21 to 30 years old	50	11.0
	31 to 40 years old	186	41.2
	41 to 50 years old	140	31.0
	51 to 60 years old	60	13.3
	61 years and above	16	3.5
	Total	452	100.0
Marital Status	Divorce	29	6.4
	Married	250	55.3
	Single	151	33.4
	Widowed	22	4.9
	Total	452	100.0
Race/ Ethnicity	Bidayuh	30	6.6
	Chinese	162	35.9
	Iban	43	9.5
	Malay	184	40.7
	Others	33	7.3
	Total	452	100.0
Highest Education Attained	High school or below	6	1.3
	Certificate/ Diploma/ Foundation	32	7.1
	Bachelor degree or professional	119	26.3
	Master degree	208	46.1
	PhD	87	19.2
	Total	452	100.0
Number of years with present institution	Less than a year	24	5.3
	1 – 5 years	143	31.6
	6 – 10 years	214	47.4
	11 – 15 years	50	11.1
	16 years and above	21	4.6
	Total	452	100.0

In this study, the respondents represent the targeted population, as most of the institutions were located in Kuching and Miri, aligning with the distribution of PHEIs in Sarawak. Additionally, the ratio of academic to non-academic staff among the respondents reflects the staffing composition commonly observed in PHEIs.

4.5.1 Location of Institution

The respondents in this study were distributed across four key locations, representing the geographical diversity of the institutions included in the analysis. A majority of the respondents, constituting 54.8% (248 out of 452), were based in Kuching. This substantial representation from Kuching suggests its prominence as a central hub for the institutions surveyed, potentially influencing the study's outcomes due to the specific socio-economic context of the region. The second-largest group of respondents, comprising 23.2% (105 respondents), was from Miri. Following this, 18.6% (84 respondents) were located in Sibu, while a smaller proportion, 3.3% (15 respondents), were from Bintulu. The distribution of respondents across these locations provided a comprehensive representation of the institutional landscape within these regions, thereby ensuring that the study captured a diverse range of perspectives and experiences.

4.5.2 Staff Category

The staff category of the respondents was a critical demographic factor analyzed in this study. The majority of respondents were categorized as academic staff, constituting 66.2% (299 out of 452) of the total sample. This predominance of academic professionals in the sample reflected the study's focus on educational institutions, where teaching and research are the primary functions. The remaining 33.8% (153 respondents) were classified as non-academic staff, encompassing administrative, technical, and support roles within the

institutions. The inclusion of both academic and non-academic staff in the sample provided a comprehensive view of the institutional environment, acknowledging the contributions of all employee categories to the overall functioning and success of educational institutions.

4.5.3 Gender

The gender distribution of the respondents was fairly balanced, with a slight predominance of female participants. Specifically, 53.1% (240 out of 452) of the respondents were female, while 46.9% (212 respondents) were male. This distribution suggested a relatively equitable representation of genders within the institutions surveyed, which was important for ensuring that the findings of the study were not biased by gender. The near parity in gender distribution also reflected broader trends in the workforce within educational institutions, where a significant presence of both male and female staff across various roles is common.

4.5.4 Age

The age distribution of the respondents was diverse, reflecting a broad range of experience levels within the institutions. The largest age group consisted of individuals aged between 31 to 40 years, comprising 41.2% (186 respondents) of the total sample. This group typically represented individuals in the prime of their careers, often holding significant responsibilities within their institutions. The next largest group included those aged 41 to 50 years, representing 31.0% (140 respondents) of the sample. This demographic likely encompassed many individuals in senior positions, bringing a wealth of experience to their roles. Additionally, 13.3% (60 respondents) were aged 51 to 60 years, and 11.0% (50 respondents) were between 21 to 30 years old, indicating the presence of both younger professionals at the start of their careers and older staff nearing retirement. A smaller

percentage, 3.5% (16 respondents), were aged 61 years and above, suggesting that a minority of respondents were in the later stages of their careers. This diverse age range ensured that the study captured perspectives from individuals at different career stages, providing a comprehensive understanding of the institutional workforce.

4.5.5 Marital Status

Marital status was another demographic factor analyzed in this study, providing insights into the personal circumstances of the respondents, which could influence their work-life balance and job satisfaction. The majority of respondents were married, comprising 55.3% (250 out of 452) of the sample. This indicates that a significant portion of the workforce had family commitments, potentially affecting their availability and work preferences. Single respondents constituted 33.4% (151 respondents) of the sample, representing a group that might have different priorities and levels of flexibility compared to their married counterparts. A smaller percentage of respondents, 6.4% (29 respondents), were divorced, while 4.9% (22 respondents) were widowed. These categories represent individuals who may encounter unique challenges and opportunities in balancing their professional and personal lives. Understanding the marital status distribution was essential for interpreting the respondents' perspectives on various issues, particularly those related to work-life balance and organizational support.

4.5.6 Race/Ethnicity

The racial and ethnic composition of the respondents reflected the multicultural nature of the institutions involved in the study. The largest ethnic group was Malay, comprising 40.7% (184 out of 452) of the respondents. This was followed closely by the Chinese ethnic group, which represented 35.9% (162 respondents) of the sample. Together,

these two groups accounted for the majority of the respondents, underscoring the significant representation of these ethnicities within the institutions. The Iban ethnic group constituted 9.5% (43 respondents), while Bidayuh respondents accounted for 6.6% (30*1 respondents). Additionally, 7.3% (33 respondents) identified as belonging to other ethnicities, reflecting the overall diversity within the institutions. The inclusion of various ethnic groups in the study ensured that the findings were reflective of the broader societal composition and that the research considered the cultural and ethnic diversity that characterized the institutional environment.

4.5.7 Highest Education Attained

The educational attainment of the respondents was another key demographic factor, reflecting the qualifications and academic backgrounds of the participants. The majority of respondents held a master's degree, accounting for 46.1% (208 out of 452) of the sample. This high level of educational attainment indicated the academic nature of the institutions and the qualifications required for many roles within these settings. A significant portion of respondents, 26.3% (119 respondents), held a Bachelor's degree or a professional qualification, further underscoring a high level of educational achievement. Additionally, 19.2% (87 respondents) had attained a PhD, emphasizing the advanced academic qualifications of the respondents. A smaller percentage of respondents had lower levels of formal education, with 7.1% (32 respondents) holding a Certificate, Diploma, or Foundation qualification, and only 1.3% (6 respondents) having a high school education or below. This distribution highlighted the emphasis on higher education within the institutions surveyed and suggested that the respondents were well-qualified for their roles.

4.5.8 Number of Years with Present Institution

The length of service with the present institution provided insights into the respondents' tenure and experience within their current roles. The largest group of respondents had been with their institution for 6 to 10 years, representing 47.4% (214 out of 452) of the sample. This indicated that a significant portion of the workforce had a considerable amount of experience within their current institution, potentially influencing their perspectives on institutional policies and practices. Another 31.6% (143 respondents) had been with their institution for 1 to 5 years, reflecting a substantial number of relatively newer employees. Respondents with 11 to 15 years of service made up 11.1% (50 respondents), while 4.6% (21 respondents) had been with the institution for 16 years or more. A smaller percentage, 5.3% (24 respondents), had less than one year of service with their current institution, representing the newest additions to the workforce. The varied lengths of service among the respondents ensured that the study captured a range of experiences, from those who were new to the institution to those who had been long-term employees.

The demographic profile of the respondents offered a detailed understanding of the characteristics of the participants in this study. The diversity in location, staff category, gender, age, marital status, race/ethnicity, education level, and tenure with the institution provided a comprehensive overview of the sample, ensuring that the study's findings were reflective of the broader population within the institutions surveyed. This detailed demographic analysis was crucial for interpreting the results of the study and understanding the factors that influenced the respondents' perspectives and experiences.

4.6 Assessment of Measurement Model (Reflective)

In Partial Least Squares Structural Equation Modeling (PLS-SEM), the assessment of a reflective measurement model involved several critical steps. The initial step focused on assessing internal consistency reliability, ensuring that the items within a construct consistently measured the same concept. Following this, convergent validity was examined to verify that items within the same construct were correlated, indicating convergence on a common underlying concept. Finally, discriminant validity was assessed to confirm that the constructs in the model were distinct from each other, ensuring that the items did not measure overlapping concepts (Hair et al., 2013; Henseler et al., 2009). These steps were essential for establishing the validity and reliability of the measurement model in PLS-SEM. The research model in this study was composed entirely of multi-item constructs, which were conceptualized as reflective rather than formative. Reflective constructs were employed to identify measures that were interrelated, exhibited unidimensionality, and demonstrated strong internal consistency. The subsequent subsections outlined the guidelines used to assess the measurement model.

4.6.1 Internal Consistency Reliability

The assessment began with the evaluation of internal consistency and reliability, utilizing two key measures: Cronbach’s Alpha and the Composite Reliability Index. As presented in Table 4.8, the Cronbach's Alpha values in this study ranged from 0.761 to 0.892, surpassing the recommended threshold of 0.7, as suggested by Hair et al. (2010).

The use of Cronbach’s Alpha (rho_c) as a reliability measure had been debated, with some scholars arguing that it underestimated true reliability (Hair et al., 2017; Sijtsma, 2008). Due to these limitations, McNeish (2018) recommended the Composite Reliability

Index as an alternative. Chin (1998) also considered composite reliability to be a more robust estimate of reliability compared to Cronbach's Alpha, as it more accurately assessed whether the indicators adequately represented their respective constructs (Fornell & Larcker, 1981). A composite reliability scores above 0.7 was generally accepted as indicating adequate internal consistency (Hair et al., 2010), with Ramayah et al. (2018) recommending a CR range between 0.7 and 0.9 as satisfactory. As reflected in Table 4.8, the composite reliability for all constructs in this study exceeded the minimum threshold of 0.7, ranging from 0.851 to 0.920, thereby confirming that the measurement model demonstrated acceptable reliability.

In this study, the construct reliability of various scales was assessed using composite reliability (rho_c), showed the following results: employee performance (0.890), training and development (0.851), job rotation (0.920), career planning (0.888), job involvement (0.857), and self-efficacy (0.885). These values exceed the commonly accepted threshold of 0.70, indicating satisfactory to good internal consistency for each construct.

Table 4.8: Results of Construct Reliability and Validity

	Cronbach's alpha	**Composite reliability (rho_c)**
EP	0.852	0.890
TD	0.761	0.851
JR	0.892	0.920
CP	0.842	0.888
JI	0.777	0.857
SE	0.837	0.885

Note: EP= Employee Performance; TD= Training & Development; JR= Job Rotation; CP= Career Planning; JI= Job Involvement; SE= Self-Efficacy

4.6.2 Indicator Reliability (Outer Loading)

After confirming the internal consistency reliability, the next step involved measuring indicator reliability (outer loadings). This evaluation was crucial to ensure that each indicator made a meaningful contribution to its respective construct. Indicator reliability was generally assessed through their outer loadings, with a commonly accepted benchmark being a standardized loading of 0.70 or higher (Hair et al., 2010). However, in social science research, it was not uncommon to encounter indicators with lower outer loadings, often falling below the 0.70 threshold, as noted by Hulland (1999). Instead of discarding these indicators outright, researchers were advised to carefully consider the impact of their removal on other reliability and validity measures. Specifically, indicators with loadings between 0.40 and 0.70 were only removed if their elimination improved internal consistency reliability or convergent validity to the recommended levels. Conversely, indicators with loadings below 0.40 were typically removed from the model to enhance its overall quality (Hair et al., 2021). However, loading values equal to and greater than 0.708, indicating a latent variable is able to explain at least 50 percent of indicator's variance (Hair et al., 2018).

Table 4.9: Values of Factor Loadings

Constructs	Items	Factor Loading	Decision
TD	TD1	0.685	Deleted
TD	TD5	0.693	Deleted
JI	JI3	0.684	Deleted
JI	JI5	0.643	Deleted

Note: EP= Employee Performance; TD= Training & Development; JR= Job Rotation; CP= Career Planning; JI= Job Involvement; SE= Self-Efficacy

Table 4.9 presented the factor loadings for various items within the constructs, focusing on ensuring that each item adequately represented its respective construct. The

threshold for acceptable factor loadings was typically set at 0.70. In this analysis, the items TD1 and TD5 under the TD construct, with factor loadings of 0.685 and 0.693, respectively, were found to fall below this threshold and were therefore deleted from the model. Similarly, the items JI3 and JI5 under the JI construct, with factor loadings of 0.684 and 0.643, respectively, also failed to meet the 0.70 standard and were removed. The decision to delete these items was made to ensure that only the most reliable and valid indicators were retained, thereby strengthening the overall construct validity and reliability of the measurement model. All remaining outer loadings were above 0.70, thereby meeting the criteria for indicator reliability (refer to Table 4.10).

4.6.3 Convergent Validity

In the reflective measurement model, two types of validity were evaluated: 1) convergent validity and 2) discriminant validity. Convergent validity referred to the extent to which the indicators of a particular construct converged or shared a significant amount of common variance (Hair et al., 2010). According to Hair et al. (2017), convergent validity was assessed using factor loadings and Average Variance Extracted (AVE).

Table 4.10 assessed the convergent validity of several constructs—EP (Employee Performance), TD (Training and Development), JR (Job Rotation), CP (Career Planning), JI Job Involvement), and SE (Self-Efficacy)—using key indicators such as Outer Loadings and AVE. Convergent validity was confirmed when the AVE exceeded 0.50, indicating that the construct explained at least 50% of the variance in its items, as supported by Fornell and Larcker (1981), Chin (2010), and Hair et al. (2022).

All constructs demonstrated AVE values exceeding the 0.50 threshold, with values ranging from 0.575 to 0.698. This confirmed adequate convergent validity for the constructs

under consideration. Specifically, the constructs TD, JR, CP, JI, and SE had AVE values of 0.657, 0.698, 0.613, 0.667, and 0.605, respectively. These values indicated that each construct captured a significant portion of the variance in its associated items, thereby validating the measurement model's reliability in reflecting the intended constructs.

The outer loadings for individual items also exceeded the recommended threshold of 0.70 (following the deletion of TD1, TD2, JI3, and JI5 items), further supporting the constructs' convergent validity. For instance, the loadings for JR ranged from 0.802 to 0.861, and those for CP ranged from 0.731 to 0.838, demonstrating that the items strongly reflected their respective constructs. These results aligned with the criteria set by Hair et al. (2022) and confirmed that the measurement model demonstrated sufficient convergent validity across all the constructs evaluated. These results show that the measurement model demonstrated adequate convergent validity.

Table 4.10: Results of Reflective Measurement Mode

Constructs	**Items**	**Indicator Reliability**	**Convergent Validity**	**Internal Consistency Reliability**		
		Outer Loadings	**AVE**	**Cronbach's Alpha**	**Composite Reliability (rho_a)**	**Composite Reliability (rho_c)**
		>0.70	>0.50	>0.70	>0.70	>0.70
EP	EP1	0.780	0.575	0.852	0.853	0.890
	EP2	0.741				
	EP3	0.749				
	EP4	0.774				
	EP5	0.774				
	EP6	0.731				
TD	TD3	0.822	0.657	0.738	0.739	0.851
	TD4	0.834				
	TD5	0.773				

Table 4.10 continued

JR	JR1	0.817	0.698	0.892	0.893	0.920
	JR2	0.861				
	JR3	0.802				
	JR4	0.856				
	JR5	0.840				
CP	CP1	0.817	0.613	0.842	0.845	0.888
	CP2	0.770				
	CP3	0.731				
	CP4	0.754				
	CP5	0.838				
JI	JI1	0.822	0.667	0.750	0.754	0.857
	JI2	0.847				
	JI4	0.779				
SE	SE1	0.785	0.605	0.837	0.838	0.885
	SE2	0.799				
	SE3	0.761				
	SE4	0.792				
	SE5	0.754				

Note: EP= Employee Performance; TD= Training & Development; JR= Job Rotation; CP= Career Planning; JI= Job Involvement; SE= Self-Efficacy

4.6.4 Discriminant Validity

Next, the discriminant validity of the model was evaluated. Discriminant validity referred to the extent to which items distinguished between different constructs or measured distinct concepts, typically assessed by examining correlations between measures that might overlap (Ramayah et al., 2018). In this study, discriminant validity was evaluated using the Fornell-Larcker criterion, cross-loadings, and the HTMT technique introduced by Henseler et al. (2015).

4.6.4.1 Fornell and Lacker Criterion

The matrix provided in Table 4.11 evaluated discriminant validity using the Fornell-Larcker criterion, which compared the square root of AVE for each construct to the correlations between that construct and others. The diagonal values represented the square

root of the AVE for each construct (CP, EP, JI, JR, SE, TD), while the off-diagonal values reflected the correlations between different constructs. For discriminant validity to be confirmed, the square root of the AVE for each construct had to be higher than its correlations with other constructs (Fornell & Larcker, 1981).

In this analysis, the square root of the AVE for each construct (CP = 0.783, EP = 0.758, JI = 0.817, JR = 0.836, SE = 0.778, TD = 0.810) exceeded its corresponding correlations with other constructs, indicating that each construct was distinct and not overly related to the others. This result confirmed that discriminant validity was established, demonstrating that the constructs in the model effectively measured different concepts.

Table 4.11: Discriminant Validity using Fornell and Lacker Criterion

	CP	**EP**	**JI**	**JR**	**SE**	**TD**
CP	0.783					
EP	0.611	0.758				
JI	0.661	0.650	0.817			
JR	0.466	0.560	0.484	0.836		
SE	0.610	0.758	0.654	0.546	0.778	
TD	0.488	0.590	0.521	0.477	0.576	0.810

Note: EP= Employee Performance; TD= Training & Development; JR= Job Rotation; CP= Career Planning; JI= Job Involvement; SE= Self-Efficacy

4.6.4.2 Cross-Loadings

Table 4.12 provided an assessment of discriminant validity by comparing the cross-loadings between constructs. In evaluating discriminant validity through cross-loadings, it was essential that each indicator loaded highly on its own construct while exhibiting lower loadings on other constructs. This approach ensured that the indicators were appropriately aligned with their respective constructs, thereby supporting the distinctiveness of the constructs within the model.

Table 4.12: Cross-Loading

	CP	EP	JI	JR	SE	TD
CP1	0.817	0.531	0.539	0.364	0.505	0.430
CP2	0.770	0.470	0.524	0.335	0.473	0.383
CP3	0.731	0.424	0.508	0.376	0.448	0.335
CP4	0.754	0.460	0.458	0.376	0.456	0.368
CP5	0.838	0.497	0.555	0.378	0.501	0.389
EP1	0.499	0.780	0.485	0.386	0.599	0.458
EP2	0.422	0.741	0.460	0.367	0.579	0.489
EP3	0.470	0.749	0.463	0.430	0.580	0.49
EP4	0.489	0.774	0.546	0.466	0.595	0.436
EP5	0.481	0.774	0.535	0.454	0.566	0.431
EP6	0.411	0.731	0.467	0.445	0.529	0.377
JI1	0.656	0.537	0.822	0.432	0.531	0.457
JI2	0.486	0.549	0.847	0.394	0.574	0.385
JI4	0.477	0.506	0.779	0.359	0.495	0.440
JR1	0.421	0.482	0.391	0.817	0.474	0.427
JR2	0.422	0.505	0.414	0.861	0.485	0.442
JR3	0.347	0.465	0.418	0.802	0.408	0.372
JR4	0.350	0.445	0.399	0.856	0.457	0.405
JR5	0.401	0.438	0.401	0.840	0.451	0.341
SE1	0.548	0.609	0.576	0.429	0.785	0.493
SE2	0.483	0.608	0.530	0.444	0.799	0.455
SE3	0.471	0.615	0.478	0.420	0.761	0.477
SE4	0.459	0.541	0.496	0.405	0.792	0.401
SE5	0.400	0.570	0.457	0.423	0.754	0.404
TD3	0.362	0.499	0.420	0.404	0.498	0.822
TD4	0.443	0.465	0.402	0.336	0.444	0.834
TD5	0.385	0.468	0.445	0.418	0.454	0.773

Note: EP= Employee Performance; TD= Training & Development; JR= Job Rotation; CP= Career Planning; JI= Job Involvement; SE= Self-Efficacy

Table 4.12 presented the cross-loadings of various items on six different constructs: CP, EP, JI, JR, SE, and TD. Each item was expected to load most strongly on its respective construct, indicating that it effectively measured that specific construct. For instance, items CP1 through CP5 loaded most strongly on the CP construct, with loadings ranging from 0.731 to 0.838, and their loadings on other constructs were lower. This pattern was consistent across all constructs: EP1 through EP6 loaded highest on EP (ranging from 0.731 to 0.780),

JI1 through JI4 on JI (ranging from 0.779 to 0.847), JR1 through JR5 on JR (ranging from 0.802 to 0.861), SE1 through SE5 on SE (ranging from 0.754 to 0.799), and TD3 through TD5 on TD (ranging from 0.773 to 0.834). The higher loadings on the intended constructs compared to others indicated strong discriminant validity, suggesting that the items were effective in measuring their respective constructs without significant overlap with other constructs in the model.

4.6.4.3 Heterotrait-Monotrait Ratio (HTMT) Criterion

Table 4.13 presented the Heterotrait-Monotrait (HTMT) ratios for evaluating discriminant validity among the constructs CP, EP, JI, JR, SE, and TD. The HTMT criterion, known for its conservative approach in assessing discriminant validity, suggests that values exceeding 0.90 may indicate potential issues with discriminant validity (Gold et al., 2001), while a more stringent threshold of 0.85 is often recommended in the literature (Kline, 2011).

In this analysis, the HTMT ratios between CP and the other constructs remained below the 0.85 threshold, with values of 0.718 for EP, 0.832 for JI, 0.538 for JR, 0.723 for SE, and 0.62 for TD. Notably, the HTMT value between CP and JI was 0.832, approaching the threshold but still within acceptable limits, thereby indicating adequate discriminant validity between these constructs.

The HTMT values between EP and other constructs range from 0.641 with JR to 0.895 with SE. The value between EP and SE (0.895) exceeds the stringent threshold of 0.85, which could suggest a potential issue with discriminant validity between these two constructs. However, in this study, it is still considered acceptable since it remains below the 0.90 threshold according to the conservative approach. Similarly, the HTMT values between

JI and other constructs, such as SE (0.822) and TD (0.703), are below the threshold, indicating good discriminant validity.

Furthermore, the HTMT ratios between JR and other constructs remain below 0.85, with the highest being 0.63 with SE, which indicates good discriminant validity. The TD construct also exhibits HTMT values below 0.85 with all other constructs, including a value of 0.728 with SE.

Table 4.13: HTMT Criterion

	CP	**EP**	**JI**	**JR**	**SE**	**TD**
CP						
EP	0.718					
JI	0.832	0.812				
JR	0.538	0.641	0.592			
SE	0.723	0.895	0.822	0.630		
TD	0.620	0.742	0.703	0.585	0.728	

Note: EP= Employee Performance; TD= Training & Development; JR= Job Rotation; CP= Career Planning; JI= Job Involvement; SE= Self-Efficacy

Overall, the HTMT criterion suggested that most constructs maintained acceptable discriminant validity. This result emphasized the importance of scrutinizing potential overlaps between constructs to ensure the robustness of the measurement model. It was thus confirmed that both reliability and validity requirements were met for this study. Subsequently, the data was prepared for further analysis within the structural model.

4.7 Assessment of Structural Model

Once the measurement model had been established, the analysis proceeded with the evaluation of the structural model. This assessment was crucial for determining the model's ability to predict one or more target constructs (Hair et al., 2017). The structural model in this study was evaluated by examining collinearity, the significance and relevance of the

interactions within the model, the explanatory capacity of the model, and its predictive potential.

4.7.1 Assessment of the Structural Model for Collinearity Issues

To ensure the robustness of the structural model, the assessment of collinearity issues among the predictor constructs was conducted. High collinearity could have inflated the variance of the coefficient estimates and led to instability in the regression model, thereby affecting the accuracy and reliability of the analysis. Collinearity was assessed using the Variance Inflation Factor (VIF), which quantified how much the variance of a regression coefficient was inflated due to collinearity among the predictors.

In this study, the VIF values for all predictor constructs were calculated and are presented in Table 4.14. The results indicated that the VIF values ranged from 1.477 to 2.280, all of which were well below the generally accepted threshold of 5.0 (Hair et al., 2011) and the more conservative threshold of 3.3 suggested by Diamantopoulos and Siguaw (2006). Specifically, the VIF values for CP as a predictor of EP and SE were 2.021 and 1.922, respectively. For JI, the VIF values were 2.240 (EP) and 2.024 (SE). JR showed the lowest collinearity with values of 1.563 (EP) and 1.477 (SE). SE and TD also exhibited low collinearity, with VIF values of 2.28 (EP), 1.666 (EP), and 1.554 (SE), respectively.

These findings suggested that collinearity among the constructs in this model was not a significant concern, as all VIF values were well within acceptable limits. This indicated that the predictor constructs were sufficiently independent of each other, and the estimates obtained from the structural model would not be distorted by multicollinearity. Consequently, the structural model could be confidently used for further analysis without concerns related to collinearity, ensuring the validity and reliability of the results.

The low VIF values confirmed that the structural relationships between the constructs could be interpreted accurately, as the collinearity between them did not pose a significant issue. This assessment reinforced the credibility of the subsequent analysis and findings derived from this structural model.

4.7.2 Significance and Relevance of the Structural Model Relationships

The structural model assessment, as presented in Table 4.14, evaluated the direct relationships between HR practices (Training and Development, Job Rotation, Career Planning, and Job Involvement) with employee performance (EP) and the direct relationships between HR practices (Training and Development, Job Rotation, Career Planning, and Job Involvement) with self-efficacy. The model's significance was tested using path coefficients (β), standard errors, bias-corrected confidence intervals (BCI), t-values, p-values, the coefficient of determination (R^2), effect size (f^2), and variance inflation factor (VIF).

Training and Development (TD) demonstrated a significant direct impact on employee performance (H1a: $\beta = 0.239$, $t = 4.326$, $p < 0.000$) and self-efficacy (H1b: $\beta = 0.221$, $t = 3.884$, $p < 0.000$), both with small effect sizes ($f^2 = 0.035$ and $f^2 = 0.072$, respectively). Hypothesis H1a assessed whether Training and Development (TD) was positively related to Employee Performance (EP). The findings indicated that the path coefficient (β) was 0.239, with a t-value of 4.326 and a p-value of 0.000, confirming a significant positive relationship. Therefore, H1a was supported. Hypothesis H1b explored whether Training and Development (TD) was positively related to Self-Efficacy (SE). The results revealed that the path coefficient (β) was 0.221, with a t-value of 3.884 and a p-value

of 0.000, confirming a significant positive relationship. Consequently, H1b was also supported.

Job Rotation (JR) similarly showed a positive and significant direct relationship with both employee performance (H2a: $\beta = 0.211$, $t = 3.039$, $p = 0.002$) and self-efficacy (H2b: $\beta = 0.194$, $t = 3.129$, $p = 0.002$), with small effect sizes ($f^2 = 0.029$ and $f^2 = 0.058$, respectively). Hypothesis H2a investigated whether Job Rotation (JR) was positively related to Employee Performance (EP). The findings indicated that the path coefficient (β) was 0.211, with a t-value of 3.039 and a p-value of 0.002, confirming a significant positive relationship, thereby supporting H2a. Hypothesis H2b examined whether Job Rotation (JR) was positively related to Self-Efficacy (SE). The analysis revealed a path coefficient (β) of 0.194, with a t-value of 3.129 and a p-value of 0.002, confirming a significant positive relationship, thereby supporting H2b.

Career Planning (CP) showed a significant positive effect on both employee performance (H3a: $\beta = 0.206$, $t = 2.597$, $p = 0.009$) and self-efficacy (H3b: $\beta = 0.208$, $t = 2.343$, $p = 0.019$). The effect size for the relationship between Career Planning (CP) and Employee Performance (EP) was small ($f^2 = 0.019$), while the effect size for the relationship between Career Planning (CP) and Self-Efficacy (SE) was also small ($f^2 = 0.051$). Therefore, both H3a and H3b were supported, indicating that Career Planning positively influenced both Employee Performance and Self-Efficacy in the study.

Job Involvement (JI) demonstrated the strongest direct relationship with both employee performance (H4a: $\beta = 0.288$, $t = 3.904$, $p = 0.000$) and self-efficacy (H4b: $\beta = 0.308$, $t = 4.087$, $p = 0.000$). Despite the statistically significant results, the effect sizes for these relationships were small ($f^2 = 0.030$ for H4a and $f^2 = 0.107$ for H4b), indicating that

the practical impact, while present, was moderate. Hypothesis H4a tested the positive relationship between Job Involvement (JI) and Employee Performance (EP), and the results supported this hypothesis, with a path coefficient of 0.288 and a t-value of 3.904. Hypothesis H4b, which examined the relationship between Job Involvement (JI) and Self-Efficacy (SE), was also supported, with a path coefficient of 0.308 and a t-value of 4.087.

The direct relationship between Self-Efficacy (SE) and employee performance (H5: $\beta = 0.438$, $t = 6.640$, $p = 0.000$) was found to be highly significant, with a medium effect size ($f^2 = 0.244$). This result indicated that self-efficacy served as a substantial predictor of employee performance, emphasizing its critical role in the workplace. Hypothesis H5 tested the positive relationship between Self-Efficacy (SE) and Employee Performance (EP), and the results confirmed this hypothesis, with a path coefficient of 0.438, a t-value of 6.640, and a p-value of 0.000.

Overall, the model demonstrated that training and development, job rotation, career planning, and job involvement were significantly and positively related to employee performance. The analysis also revealed positive direct relationships between these HR practices and self-efficacy, as well as between self-efficacy and employee performance. These findings highlighted the importance of investing in HR practices not only to enhance employee performance directly but also to build self-efficacy, which further contributed to improved performance. The results provided robust support for the hypothesized relationships, emphasizing the value of fostering effective HR practices and self-efficacy to achieve optimal performance outcomes within the organization.

Table 4.14: Structural Model Assessment

Hypothesis	Direct Relationship	Path Coefficient (β)	Std. Error	BCI LL	BCI UL	t-value	p-value	R^2	f^2	Effect Size	VIF	Decision
H1a	TD → EP	0.239	0.055	0.127	0.342	4.326	0.000	0.656	0.035	Small	1.666	Supported
H1b	TD → SE	0.221	0.057	0.112	0.329	3.884	0.000	0.561	0.072	Small	1.554	Supported
H2a	JR → EP	0.211	0.069	0.084	0.361	3.039	0.002	0.656	0.029	Small	1.563	Supported
H2b	JR → SE	0.194	0.062	0.081	0.324	3.129	0.002	0.561	0.058	Small	1.477	Supported
H3a	CP → EP	0.206	0.079	0.054	0.360	2.597	0.009	0.656	0.019	Small	2.021	Supported
H3b	CP → SE	0.208	0.089	0.026	0.371	2.343	0.019	0.561	0.051	Small	1.922	Supported
H4a	JI → EP	0.288	0.074	0.141	0.433	3.904	0.000	0.656	0.030	Small	2.240	Supported
H4b	JI → SE	0.308	0.075	0.162	0.452	4.087	0.000	0.561	0.107	Small	2.024	Supported
H5	SE → EP	0.438	0.066	0.307	0.563	6.640	0.000	0.656	0.244	Medium	2.280	Supported
H1c	TD → SE → EP	0.097	0.029	0.048	0.159	3.391	0.001	0.656				Supported
H2c	JR → SE → EP	0.085	0.033	0.031	0.165	2.583	0.010	0.656				Supported
H3c	CP → SE → EP	0.091	0.040	0.018	0.175	2.277	0.023	0.656				Supported
H4c	JI → SE → EP	0.135	0.039	0.073	0.227	3.494	0.000	0.656				Supported

Note: Significant level = 0.05, test type = two tailed, EP= Employee Performance; TD= Training & Development; JR= Job Rotation; CP= Career Planning; JI= Job Involvement; SE= Self-Efficacy

4.7.3 Assessment the Level of R^2 (Coefficient of Determination)

The R^2 values in the structural model served as critical indicators of the model's explanatory power, representing the proportion of variance in the dependent variables (endogenous constructs) that was explained by the independent variables (exogenous constructs) included in the model. As a guideline, R^2 values of 0.75, 0.50, and 0.25 were considered substantial, moderate, and weak, respectively (Hair et al., 2017). In this study, the R^2 value for Employee Performance (EP) and Self-Efficacy (SE) was reported as 0.656, as shown in Table 4.14. These values indicated the model's predictive accuracy and the extent to which the independent variables—Training and Development (TD), Job Rotation (JR), Career Planning (CP), Job Involvement (JI), and Self-Efficacy (SE)—accounted for the variance in the dependent outcomes.

The R^2 value for Employee Performance (EP) was 0.656, indicating that 65.6% of the variance in employee performance was explained by the combined influence of training and development, job rotation, career planning, job involvement, and self-efficacy. This substantial R^2 value suggested that the model had moderate explanatory power for predicting employee performance. In other words, the factors included in the model were significant predictors of how well employees performed their tasks. This finding emphasized the importance of these organizational behavior factors in shaping employee outcomes and reinforced the model's effectiveness in capturing the key determinants of employee performance.

Similarly, the R^2 value for Self-Efficacy (SE) was 0.561, indicating that 56.1% of the variance in self-efficacy was accounted for by the predictors—training and development, job rotation, career planning, and job involvement. This value also fell within the range of

moderate explanatory power, demonstrating that the model effectively predicted self-efficacy, which served as a crucial mediator in the relationship between organizational factors and employee performance. The significant R^2 for self-efficacy highlighted its role as a vital psychological construct that influenced employee behavior and performance in the workplace.

The moderate R^2 values for both employee performance and self-efficacy demonstrated that the model possessed robust explanatory power, effectively capturing the dynamics of how organizational practices and individual psychological factors interacted to influence job performance. These results suggested that interventions aimed at enhancing training and development, job rotation, career planning, and job involvement were likely to have a substantial impact on improving self-efficacy and, consequently, employee performance. Additionally, the model's moderate predictive accuracy supported its use as a reliable framework for understanding and improving employee outcomes in organizational settings.

4.7.4 Assessment the Level of Effect Size (f^2)

Effect size (f^2) served as a crucial measure in structural equation modeling, offering insights into the contribution of each exogenous construct to the R^2 value of an endogenous construct. It provided an understanding of the extent to which each predictor variable influenced the variance explained in the outcome variable, adding depth to the interpretation beyond the statistical significance of path coefficients alone. Following Cohen's (1988) guidelines, f^2 values of 0.02, 0.15, and 0.35 were classified as small, medium, and large effects, respectively. These thresholds were widely recognized and applied in assessing the

substantive impact of predictor variables in structural models (Cohen, 1988; Hair et al., 2017).

In the current study, the effect sizes for various hypotheses were calculated and presented in Table 4.14. These values provided a detailed understanding of the influence of organizational behavior factors such as Training and Development (TD), Job Rotation (JR), Career Planning (CP), Job Involvement (JI), and Self-Efficacy (SE) on Employee Performance (EP).

The effect size for the direct relationship between Training and Development (TD) and Employee Performance (EP) (H1a) was calculated at $f^2 = 0.035$, which fell within the range of a small effect. This finding suggested that while training and development positively contributed to employee performance, its impact was modest. Similarly, the effect size for the relationship between TD and Self-Efficacy (SE) (H1b) was $f^2 = 0.072$, also indicating a small effect. These small effect sizes implied that, although training and development were beneficial for enhancing employee performance and self-efficacy, they were not the sole determinants, and other factors might have played more significant roles.

The Job Rotation (JR) construct exhibited a small effect size on both employee performance (H2a, $f^2 = 0.029$) and self-efficacy (H2b, $f^2 = 0.058$). These values indicated that job rotation contributed to improvements in performance and self-efficacy, but the magnitude of its impact was relatively minor. This finding suggested that job rotation, while useful, may have needed to be supplemented by other interventions to achieve more substantial improvements in these outcomes.

Career Planning (CP) exhibited small effect sizes on both employee performance (H3a, $f^2 = 0.019$) and self-efficacy (H3b, $f^2 = 0.051$). The small f^2 values highlighted that

career planning played a role in influencing these outcomes, but its impact was limited. This suggested that while career planning was an important tool for employee development, its effects on performance and self-efficacy might have been enhanced when combined with other developmental strategies.

The effect size for the relationship between Job Involvement (JI) and Employee Performance (EP) (H4a) was $f^2 = 0.030$, indicating a small effect. For the relationship between JI and Self-Efficacy (SE) (H4b), the effect size was slightly higher at $f^2 = 0.107$, still within the small range but approaching medium. These results suggested that job involvement was somewhat influential in enhancing employee performance and self-efficacy, although other factors likely contributed more significantly to these outcomes.

The effect size for the direct impact of Self-Efficacy (SE) on Employee Performance (EP) (H5) was $f^2 = 0.244$, which was classified as a medium effect. This finding underscored the importance of self-efficacy as a key determinant of employee performance. The relatively larger f^2 value indicated that self-efficacy played a substantial role in how employees performed their tasks, aligning with the broader literature that identified self-efficacy as a critical predictor of work-related outcomes.

The effect size analysis in this study provided valuable insights into the relative importance of various organizational behavior factors in predicting employee performance and self-efficacy. While constructs such as training and development, job rotation, career planning, and job involvement all contributed to performance outcomes, their effects were generally small. In contrast, self-efficacy demonstrated a more pronounced impact, highlighting its pivotal role in enhancing employee performance.

These findings suggested that while traditional organizational practices like training and career planning were necessary, they may not have been sufficient on their own to drive significant improvements in employee performance. Organizations were encouraged to consider incorporating strategies to boost self-efficacy, which could have led to more substantial and meaningful performance gains. Moreover, the small effect sizes observed for many of the HR practices underscored the complexity of employee performance, indicating that a multi-faceted approach addressing various dimensions of employee development was likely required to optimize outcomes.

The effect size analysis emphasized the need for a balanced approach to employee development that combined HR practices with interventions aimed at enhancing psychological constructs like self-efficacy. This approach was likely to yield better results in improving employee performance and achieving organizational goals.

4.7.5 Assessment of the Predictive Relevance (Q^2)

The predictive relevance of the structural model was evaluated using the Q^2 statistic, calculated through the cross-validation procedure. This assessment was crucial for understanding the model's ability to predict endogenous constructs, specifically Employee Performance and Self-Efficacy. The Q^2 values, along with the Root Mean Square Error (RMSE) and Mean Absolute Error (MAE) values, were presented in Table 4.15.

The Q^2 value for Employee Performance was 0.559, indicating that the model exhibited moderate predictive relevance for this construct. A Q^2 value greater than 0.50 generally signified strong predictive relevance, suggesting that the model was capable of accurately predicting the outcomes associated with Employee Performance. This value indicated that approximately 55.9% of the variance in Employee Performance could be

predicted by the model. The corresponding RMSE of 0.685 and MAE of 0.494 further corroborated the model's predictive accuracy, as these error measures suggested that the predictions were relatively close to the actual observed values.

Similarly, the Q^2 value for Self-Efficacy was 0.546, indicating strong predictive relevance. This value implied that the model could predict 54.6% of the variance in Self-Efficacy, demonstrating its effectiveness in forecasting this outcome. The associated RMSE and MAE values for Self-Efficacy were 0.694 and 0.486, respectively, reflecting a similar level of predictive precision as observed for Employee Performance.

The Q^2 values obtained for both endogenous variables, Employee Performance and Self-Efficacy, were over 0, suggesting that the model had substantial predictive relevance (Hair et al., 2017). These findings indicated that the model was well-suited for predicting these outcomes, providing valuable insights for both academic research and practical applications. The relatively low RMSE and MAE values further supported the robustness of the model's predictions, reinforcing its potential as a reliable tool for understanding the determinants of Employee Performance and Self-Efficacy in various organizational contexts.

Table 4.15: Model's Predictive Power

	Q^2predict	**RMSE**	**MAE**
Employee Performance	0.559	0.685	0.494
Self-Efficacy	0.546	0.694	0.486

4.7.6 Assessment of Mediation Analysis

After testing the direct effects, the mediator hypothesis was evaluated. Referring to Table 4.14, mediation analysis was conducted to assess the indirect effects of the exogenous

constructs on the endogenous construct, Employee Performance (EP), through the mediator Self-Efficacy (SE). This analysis followed the approach suggested by Preacher and Hayes (2004, 2008), using the bootstrapping method to estimate the indirect effects, with 95% bias-corrected confidence intervals (BCI) to determine whether the mediation effects were statistically significant.

The indirect effect of Training and Development (TD) on Employee Performance (EP) through Self-Efficacy (SE) (H1c) was examined. The path coefficient for the indirect effect was $\beta = 0.097$, with a t-value of 3.391 and a p-value of 0.001. The 95% bias-corrected confidence interval (BCI) ranged from 0.048 to 0.159, which did not include zero, indicating that the mediation effect was statistically significant. This result suggested that Self-Efficacy (SE) significantly mediated the relationship between Training and Development (TD) and Employee Performance (EP), providing evidence that the positive impact of training and development on employee performance operated, in part, through enhancing self-efficacy. Therefore, the hypothesis H1c was supported.

The mediation effect of Job Rotation (JR) on Employee Performance (EP) through Self-Efficacy (SE) (H2c) was tested. The indirect path coefficient was $\beta = 0.085$, with a t-value of 2.583 and a p-value of 0.010. The 95% bias-corrected confidence interval (BCI) ranged from 0.031 to 0.165, not crossing zero, which confirmed the statistical significance of the mediation. This finding indicated that Self-Efficacy (SE) significantly mediated the effect of Job Rotation (JR) on Employee Performance (EP), suggesting that the process of rotating jobs contributed to performance improvements partly by increasing employees' self-efficacy. Hence, hypothesis H2c was supported.

The indirect effect of Career Planning (CP) on Employee Performance (EP) through Self-Efficacy (SE) (H3c) was analyzed, yielding a path coefficient of $\beta = 0.091$, with a t-value of 2.277 and a p-value of 0.023. The 95% bias-corrected confidence interval (BCI) ranged from 0.018 to 0.175, which did not include zero, indicating that this mediation effect was statistically significant. This result implied that Self-Efficacy (SE) significantly mediated the relationship between Career Planning (CP) and Employee Performance (EP), highlighting that the benefits of career planning on performance were, in part, due to enhanced self-efficacy. Therefore, hypothesis H3c was supported.

The mediation analysis for Job Involvement (JI) and Employee Performance (EP) through Self-Efficacy (SE) (H4c) was conducted. The indirect path coefficient was $\beta = 0.135$, with a t-value of 3.494 and a p-value of 0.000. The 95% bias-corrected confidence interval (BCI) ranged from 0.073 to 0.227, which excluded zero, confirming the statistical significance of the mediation effect. This finding indicated that Self-Efficacy (SE) significantly mediated the relationship between Job Involvement (JI) and Employee Performance (EP), suggesting that the positive impact of job involvement on performance was largely mediated through its effect on self-efficacy. Consequently, hypothesis H4c was supported.

The mediation analysis demonstrated that Self-Efficacy (SE) played a significant mediating role (complementary) in the relationships between human resource management (HR) practices—Training and Development, Job Rotation, Career Planning, and Job Involvement—and Employee Performance (EP). All the indirect effects were found to be statistically significant, with 95% bias-corrected confidence intervals that did not include zero, thereby supporting the hypotheses. This finding indicated that the enhancement of

employee performance through these HR practices was significantly attributable to their ability to increase self-efficacy, highlighting the importance of fostering self-efficacy within organizational settings to improve overall performance.

4.8 Chapter Summary

Chapter 4 provided a detailed examination of the data analysis process and the results obtained from both the measurement and structural models. The chapter began by establishing the reliability and validity of the constructs used in the study. Through rigorous testing, all constructs were shown to have met the necessary thresholds for reliability, with Cronbach's alpha and composite reliability values exceeding 0.7. The factor loadings for each indicator were found to be above 0.7, and the Average Variance Extracted (AVE) values consistently surpassed 0.5, confirming the constructs' convergent validity.

The chapter then progressed to the evaluation of the structural model, which was assessed using the R^2 values to determine the model's predictive accuracy. The analysis revealed that the model had moderate to substantial explanatory power, with the R^2 values indicating that a significant portion of the variance in the dependent variables could be explained by the independent variables. Of the hypotheses tested, all were supported, providing strong evidence for the proposed relationships between the constructs.

Additionally, the chapter addressed the mediation effects within the model. The mediation analysis confirmed that self-efficacy played a significant role in mediating the relationships between the HR practices and employee performance.

Overall, Chapter 4 validated the measurement and structural models, confirming the reliability and validity of the constructs and supporting the majority of the hypothesized relationships.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter examined the main research findings related to all the variables and their dimensions used in the study. The discussion built on the findings from the previous chapter, linking them to theoretical perspectives and past studies. The chapter was organized into several sections: the first section recapitulated the research findings of the study, while the second section offered a detailed discussion of the main findings in relation to the underlying theories and past research. The third section explored the study's theoretical, methodological, and practical implications. The fourth section addressed the study's limitations and provided suggestions for future research based on these limitations. Finally, the fifth section presented conclusions drawn from the discussion and findings.

5.2 Recapitulation of Study

This study was conducted to examine the impact of HR practices on employee performance within PHEIs in Sarawak. The research specifically focused on investigating the relationships between four key HR practices—training and development, job rotation, career planning, and job involvement—and two critical outcomes: employee performance and self-efficacy. Additionally, the study aimed to understand the mediating role of self-efficacy in the relationship between HR practices and employee performance.

The research was driven by the following research questions:

1. What is the relationship between HR practices in terms of training and development, job rotation, career planning and job involvement with employee performance in PHEIs in Sarawak?
2. What is the relationship between HR practices in terms of training and development, job rotation, career planning and job involvement with self-efficacy in PHEIs in Sarawak?
3. What is the relationship between self-efficacy and employee performance in PHEIs in Sarawak?
4. Does self-efficacy mediate the relationship between HR practices in terms of training and development, job rotation, career planning and job involvement with employee performance in PHEIs in Sarawak?

This research objective was supported by four (4) specific objectives as follows:

1. To examine the relationship between HR practices in terms of training and development, job rotation, career planning, and job involvement, and employee performance in PHEIs in Sarawak.
2. To examine the relationship between HR practices in terms of training and development, job rotation, career planning, and job involvement, and self-efficacy in PHEIs in Sarawak.
3. To examine the relationship between self-efficacy and employee performance in PHEIs in Sarawak.
4. To investigate the mediating effect of self-efficacy in the relationship between HR practices in terms of training and development, job rotation, career planning, and job involvement, and employee performance in PHEIs in Sarawak.

The research questions and objectives outlined above formed the basis for developing 13 hypotheses in this study. Data collection was conducted entirely online, resulting in a filtered sample of 452 respondents for analysis. SPSS was utilized for data screening and the creation of descriptive statistics, while SmartPLS 4.0 was employed to analyze both the inner and outer measurement models of the study.

Through a comprehensive analysis, the study aimed to provide empirical evidence on how HR practices in PHEIs could be optimized to enhance employee performance. The findings were expected to offer valuable insights for HR managers and policymakers within the education sector, particularly in Sarawak, on the importance of fostering an environment that supports employee development, career progression, and job engagement.

The results of the study were anticipated to contribute to the broader understanding of how specific HR practices directly influenced employee performance and how self-efficacy functioned as a crucial mediating factor. By focusing on PHEIs in Sarawak, this research also provided a contextualized perspective that was particularly relevant to the educational institutions operating in this region.

This recapitulation highlighted the importance of HR practices in influencing both self-efficacy and employee performance, emphasizing the need for targeted strategies to enhance these outcomes in PHEIs. The next section discusses the detailed findings and their implications for theory and practice.

5.3 Discussion of the Findings

This study investigated the influence of HR practices on employee performance in PHEIs in Sarawak, with self-efficacy acting as a mediator. Data from 452 academic and non-

academic staff were analyzed to test thirteen hypotheses. The findings confirmed significant relationships between HR practices—including training and development, job rotation, career planning, and job involvement—and both self-efficacy and employee performance. Furthermore, self-efficacy was found to significantly mediate the relationship between HR practices and employee performance, reinforcing the role of psychological empowerment in workplace outcomes.

The study emphasized that well-structured HR strategies not only enhanced employees' competencies and engagement but also fostered their belief in their abilities, leading to improved performance. Employees who perceived strong HR support demonstrated higher self-efficacy, which in turn contributed to their job performance. These findings underscored the need for institutions to adopt HR policies that simultaneously develop employees' skills and strengthen their self-confidence, ensuring long-term organizational success.

5.3.1 Research Question 1

What is the relationship between HR practices in terms of training and development, job rotation, career planning and job involvement with employee performance in PHEIs in Sarawak?

5.3.1.1 Training and Development, and Employee Performance

H1a: There is a positive relationship between training and development, and employee performance.

The results of this study supported Hypothesis 1a, confirming a significant relationship between Training and Development (TD) and Employee Performance (EP). The findings indicated that effective training and development programs had a positive impact on employee performance in PHEIs (Diamantidis & Chatzoglou, 2019; Karim et al., 2019; Nyaisu et al., 2017; Somuah et al., 2024); Van Assen, 2020). Employees who participated in these programs were better equipped to perform their tasks, which subsequently enhanced the overall effectiveness of the organization.

These findings aligned with other studies that also demonstrated the positive effects of training and development on employee performance. Sifawa and Mukasa (2024) found that ongoing professional development programs significantly improved teaching effectiveness and research output among academic staff. Similarly, Al-refaei (2021) reported that training and development programs led to better job performance, higher job satisfaction, and stronger organizational commitment among university employees. These studies, like the current one, highlighted the importance of continuous training in promoting high performance in academic settings.

The items used to measure training and development in this study—such as regular participation in training programs, periodic assessment of training effectiveness, the role of training in academic and professional growth, the importance of training for career advancement, and the quality of trainers—were directly linked to practical outcomes that enhanced employee performance. These aspects ensured that employees not only acquired

essential skills but also received the guidance and feedback needed to apply these skills effectively in their roles, leading to improved performance.

These findings were consistent with studies that found a positive link between training practices and improved employee performance (Diamantidis & Chatzoglou, 2019; Karim et al., 2019). These studies showed that employees who were aware of and motivated by training opportunities tended to perform better in their jobs. Additionally, the important connection between training and development and employee performance, which included contributing to the organizational environment and adjusting to changes and new situations, had been well-documented in past literature (Nyaisu et al., 2017; Somuah et al., 2024).

The significant relationship between training and development and employee performance found in this study aligned with existing research and highlighted the important role of these HR practices in building a capable, adaptable, and high-performing workforce. The consistent findings across various studies suggested that when training and development programs were well-designed and aligned with organizational goals, they led to significant improvements in employee performance, ultimately supporting the success and sustainability of PHEIs in Sarawak.

5.3.1.2 Job Rotation and Employee Performance

H2a: There is a positive relationship between job rotation and employee performance.

The analysis of Hypothesis 2a, which proposed a significant relationship between Job Rotation (JR) and Employee Performance (EP), was supported by the data. The findings confirmed that job rotation positively impacted employee performance in PHEIs (Alaflaq et al., 2024; Arasanmi & Krishna, 2019; Cherotich et al., 2021; Gubicza & Remsei, 2024; Lee

et al., 2017; Tichat, 2022). Employees who regularly experienced job rotation tended to perform better in their roles, contributing to the overall success of the institution.

This finding was consistent with most previous studies that explored the connection between job rotation and employee performance. Previous research consistently highlighted that job rotation enhanced employee performance by broadening their skills and knowledge, increasing adaptability, and improving problem-solving abilities (Alaflaq et al., 2024; Cherotich et al., 2021; Gubicza & Remsei, 2024; Lee et al., 2017; Suleman et al., 2022; Tichat, 2022). Employees who rotated through various roles accumulated a wealth of experience, which directly contributed to their professional growth and job stability. This alignment with the items of measurement in this study, where participants reported that job rotation broadened their knowledge, enhanced their performance, and contributed to their professional development, further supported the validity of these findings.

In the context of PHEIs, where the work environment was dynamic and demanded a wide range of skills, job rotation was particularly beneficial. It helped employees develop a comprehensive understanding of the institution's operations, which improved their performance in their primary roles. Yakubu and Majeed (2018) found that job rotation led to higher job satisfaction and engagement among employees, which in turn resulted in better performance outcomes. This mirrored the current study's findings, suggesting that job rotation not only prevented job monotony but also promoted a more versatile and effective workforce.

Furthermore, job rotation contributed to the overall effectiveness of an institution by fostering a more collaborative work environment. The relationship between job rotation and employee performance was rooted in the theory that diverse experiences led to improved job

satisfaction, motivation, and overall performance (Suleman et al., 2022). This enhanced collaboration and understanding among employees led to more effective teamwork and improved institutional performance.

The significant relationship between job rotation and employee performance observed in this study reinforced the importance of job rotation as a strategic HR practice. This result was consistent with previous studies, which found that job rotation positively impacted employee performance by enhancing skills, motivation, and adaptability. When implemented effectively, job rotation led to substantial improvements in employee performance, contributing to the overall strength and effectiveness of PHEIs.

5.3.1.3 Career Planning and Employee Performance

H3a: There is a positive relationship between career planning and employee performance.

The analysis for Hypothesis 3a, which examined the relationship between Career Planning (CP) and Employee Performance (EP), revealed a significant positive relationship. The findings indicated that effective career planning had a meaningful impact on employee performance within PHEIs. This suggested that when academic and non-academic staff had a clear career path and set specific goals aligned with their professional aspirations, they were more likely to perform better in their roles.

This result aligned with most previous studies that showed positive relationships between career planning and employee performance (Ahmed, 2019; Arif et al., 2022; Burić & Moe, 2020; Florence, 2020; Mahmood, 2021; Rizanuddin, 2020; Wulantika & Ayuningtias, 2020). Research by Widi and Kusuma (2023) and Shastri (2023) found that employees who engaged in structured career planning were more focused and motivated,

which led to higher levels of performance. The items of measurement used in this study—such as having a clear career path, setting short-term development goals, and aligning personal growth with organizational needs—directly contributed to enhancing employee performance by providing direction and purpose in their work.

In the context of PHEIs, career planning was particularly crucial due to the competitive environment in which these institutions operated. Effective career planning helped attract and retain talented staff by offering clear pathways for professional growth, which in turn enhanced job satisfaction and reduced turnover rates. This was supported by studies like those of Arhipova and Kokina (2022), which emphasized the importance of career planning in creating a supportive environment where employees felt valued and saw opportunities for advancement. When employees perceived that their personal growth was aligned with the institution's goals, as indicated by the measurement items, they were more likely to be committed and perform at higher levels.

Moreover, previous research demonstrated that career planning significantly enhanced employee engagement and productivity. Litynska (2023) showed that career planning initiatives led to improved commitment and performance metrics among higher education staff. Similarly, Suparjo and Nurchayati (2022) highlighted that career development, facilitated through mentoring and counseling, was strongly linked to better job performance. These findings were consistent with the current study, reinforcing the idea that when employees were provided with clear career guidance and development opportunities, their performance improved.

The significant relationship between career planning and employee performance found in this study was consistent with most of the existing literature. Effective career

planning provided employees with a clear direction, aligned their goals with organizational objectives, and ultimately enhanced their performance. By investing in robust career planning programs, PHEIs fostered a more motivated and high-performing workforce, which was essential for the institution's long-term success.

5.3.1.4 Job Involvement and Employee Performance

H4a: There is a positive relationship between job involvement and employee performance.

The findings from this study supported Hypothesis 4a, which proposed a significant relationship between Job Involvement (JI) and Employee Performance (EP). The results indicated that higher levels of job involvement were positively associated with better employee performance in PHEIs. This suggested that when employees were deeply engaged and invested in their work, they tended to perform better, contributing more effectively to their institution's goals.

This result aligned with most previous studies that examined the connection between job involvement and employee performance. Gopinath et al. (2020) found that job involvement was closely linked to higher productivity, job satisfaction, and organizational commitment among university faculty members. Similarly, Bastian and Widodo (2022) highlighted that job involvement was a strong predictor of innovative work behaviors, which were essential for advancing educational practices and research. These studies suggested that employees who were more involved in their work were not only more committed but also more likely to go above and beyond their basic job responsibilities, leading to improved performance.

The items used to measure job involvement in this study—such as personal investment in work, collaboration within the department, and involvement in decision-making—highlighted the various ways in which job involvement enhanced performance. Employees who felt that their work was meaningful and that they had a say in important decisions were more likely to be motivated and engaged, which in turn boosted their performance.

In the context of PHEIs, where high levels of employee performance were crucial for maintaining academic standards and operational efficiency, fostering job involvement was particularly important. As noted by Ahmad et al. (2021), job involvement in these institutions directly impacted the quality of education and services provided. Faculty members who were highly involved in their teaching and research responsibilities contributed to better student outcomes and a stronger institutional reputation. Similarly, administrative staff who were deeply engaged in their work contributed to the smooth operation of the institution, ensuring that it met its goals effectively.

This study's findings were consistent with past studies that indicated employees with high job involvement tended to be more committed to their roles, leading to better performance outcomes (Hermawati & Mas, 2017; Johari & Yahya, 2016; Musafir, 2022; Thevanes & Dirojan, 2018). When employees were personally invested in their work and collaborated effectively with their colleagues, they were more likely to achieve higher levels of job performance.

The significant relationship between job involvement and employee performance observed in this study confirmed the importance of fostering a work environment where employees felt engaged and involved in their roles. This result was consistent with most

previous studies, reinforcing the idea that job involvement was a key factor in enhancing employee performance, particularly in the competitive and dynamic environment of higher education institutions. By promoting job involvement, PHEIs achieved better performance outcomes and strengthened their overall institutional effectiveness.

5.3.2 Research Question 2

What is the relationship between HR practices in terms of training and development, job rotation, career planning and job involvement with self-efficacy in PHEIs in Sarawak?

5.3.2.1 Training and Development, and Self-Efficacy

H1b: There is a positive relationship between training and development, and self-efficacy.

The findings from this study strongly supported Hypothesis 1b, which proposed a significant relationship between Training and Development (TD) and Self-Efficacy (SE). The results confirmed that effective training and development programs positively impacted employees' self-efficacy in PHEIs. This suggested that when employees participated in well-structured training programs, their confidence in their ability to perform tasks successfully increased.

This result was consistent with most previous studies that explored the link between training and self-efficacy. Past studies by Galos and Aldridge (2021) and Mata et al. (2021) found that training initiatives significantly enhanced employees' self-efficacy by providing them with the knowledge and skills necessary to perform their jobs effectively. Similarly, Ferrari (2022) and Goulart et al. (2022) demonstrated that comprehensive training programs boosted employees' confidence in their abilities, which in turn led to better performance and higher motivation levels.

In the context of PHEIs, where the demands on staff continuously evolved, enhancing self-efficacy through training and development was particularly important. As noted by Mazzetti and Schaufeli (2022) and Arulsamy (2023), when employees believed in their capabilities, they were more likely to take on challenging tasks, contribute positively to the institution, and adapt to changes more effectively. This increased confidence not only improved individual performance but also contributed to the overall success of the institution.

The significant relationship between training and development and self-efficacy observed in this study aligned with existing literature, reinforcing the importance of investing in employee training as a means to enhance their confidence and capabilities. This result was consistent with most previous studies, which found that well-designed training and development programs played a crucial role in building a competent and self-assured workforce. By focusing on improving self-efficacy through training, PHEIs ensured that their employees were well-prepared to meet the challenges of their roles and contribute effectively to the institution's goals.

5.3.2.2 Job Rotation and Self-Efficacy

H2b: There is a positive relationship between job rotation and self-efficacy.

The analysis of Hypothesis 2b, which proposed a significant relationship between Job Rotation (JR) and Self-Efficacy (SE), was supported by the study's findings. Job rotation positively impacted employees' self-efficacy in PHEIs. This indicated that when employees were rotated through different roles or departments, their confidence in handling various tasks and responsibilities increased, subsequently enhancing their self-efficacy.

This result was consistent with most studies that explored the relationship between job rotation and self-efficacy. Erum et al. (2020) found that job rotation significantly boosted self-efficacy by exposing employees to a variety of tasks and roles, thereby enhancing their skills, knowledge, and adaptability. This exposure encouraged learning and built confidence, key components of self-efficacy. Employees who rotated through different positions developed a broader skill set and a stronger belief in their ability to manage diverse job functions effectively.

In PHEIs, where adaptability and a diverse skill set were essential, job rotation played a key role in building self-efficacy among employees. By working in various areas of the institution, employees became more versatile and confident, which was crucial for success in a dynamic educational environment. This finding was consistent with broader research, indicating that job rotation effectively enhanced self-efficacy when applied correctly.

The significant relationship between job rotation and self-efficacy observed in this study supported the idea that rotating employees through different roles effectively increased their confidence and capability. This result aligned with most previous studies, which showed that job rotation positively impacted self-efficacy, ultimately contributing to a more competent and adaptable workforce. By strategically using job rotation, PHEIs enhanced their employees' self-efficacy, leading to better performance and greater overall institutional effectiveness.

5.3.2.3 Career Planning and Self-Efficacy

H3b: There is a positive relationship between career planning and self-efficacy.

The analysis of Hypothesis 3b, which proposed a significant relationship between Career Planning (CP) and Self-Efficacy (SE), was supported by the study's findings.

Effective career planning positively influenced employees' self-efficacy in PHEIs. This indicated that when employees engaged in structured career planning, they felt more confident in their ability to achieve their career goals, thereby boosting their overall self-efficacy.

This finding aligned with most existing studies that examined the link between career planning and self-efficacy. Research by Chan (2018), Kleine et al. (2021), and Monteiro et al. (2021) showed that individuals who actively participated in career planning processes tended to develop a clearer sense of direction and purpose in their careers. This clarity helped them set realistic goals and create actionable strategies, which in turn enhanced their belief in their ability to succeed. As employees saw themselves progressing towards their goals, their self-efficacy was further reinforced.

In PHEIs, where career advancement and skill development were highly prioritized, career planning was essential for nurturing self-efficacy among employees. When institutions offered opportunities for career growth and supported employees in their planning efforts, they helped create a workforce that was both capable and confident in tackling future challenges. This aligned with the findings of Wilhelm and Hirschi (2019) and Chan (2020), who highlighted that career planning strengthened self-efficacy by giving individuals a greater sense of control over their career paths.

The significant relationship between career planning and self-efficacy observed in this study supported the idea that well-structured career planning effectively enhanced employees' confidence in their abilities. The result was consistent with most previous studies, which showed that career planning positively impacted self-efficacy, leading to a more motivated and capable workforce. By encouraging and supporting career planning,

PHEIs helped their employees develop the self-efficacy needed to succeed in their roles and contribute to the institution's overall success.

5.3.2.4 Job Involvement and Self-Efficacy

H4b: There is a positive relationship between job involvement and self-efficacy.

The findings from this study supported Hypothesis 4b, which proposed a significant relationship between Job Involvement (JI) and Self-Efficacy (SE). The results indicated that higher job involvement positively influenced employees' self-efficacy in PHEIs. This suggested that when employees were highly engaged and invested in their work, their belief in their ability to perform tasks successfully was strengthened.

This result was consistent with most previous studies that explored the connection between job involvement and self-efficacy. Research by Chuang et al. (2018) and Demir (2020) found that employees who were deeply involved in their work tended to develop a stronger sense of competence, which enhanced their self-efficacy. When employees were psychologically invested in their roles, they were more likely to feel capable and confident in handling various tasks and challenges, leading to a higher level of self-efficacy.

In the context of PHEIs, where high levels of employee engagement were crucial for maintaining academic standards and achieving institutional goals, fostering job involvement was particularly important. As noted by Albrecht et al. (2023), when employees were deeply involved in their work, they not only felt more competent but also took greater initiative in overcoming challenges. This ongoing engagement and the resulting sense of mastery reinforced self-efficacy, leading to sustained high performance and job satisfaction.

The significant relationship between job involvement and self-efficacy observed in this study highlighted the importance of promoting job involvement as a means to enhance employees' confidence and capabilities. This result was consistent with most previous studies, which showed that job involvement positively impacted self-efficacy, contributing to a more motivated and effective workforce. By encouraging higher levels of job involvement, PHEIs helped their employees develop the self-efficacy needed to excel in their roles and support the institution's overall success.

5.3.3 Research Question 3

What is the relationship between self-efficacy and employee performance in PHEIs in Sarawak?

H5: There is a positive relationship between self-efficacy and employee performance.

The findings from this study confirmed Hypothesis 5, which proposed a significant relationship between Self-Efficacy (SE) and Employee Performance (EP). The results indicated a positive relationship between self-efficacy and employee performance in PHEIs. This suggested that employees who had confidence in their abilities were more likely to perform well in their roles.

This result was consistent with most previous studies that explored the connection between self-efficacy and job performance. Research by Cetin and Askun (2018) and Moè et al. (2010) found that employees with high self-efficacy tended to approach challenging tasks with confidence, persist through difficulties, and achieve higher productivity. Their belief in their capabilities drove them to set ambitious goals and work diligently to achieve

them, contributing to better performance outcomes (Al-Ajarmeh, 2022; Basyir, 2019; Hadi, 2023; Harini et al., 2019).

The items used to measure self-efficacy in this study—such as confidence in managing difficult tasks, contributing to strategic discussions, and setting departmental goals—were closely linked to improved job performance. Employees who were confident in their abilities were more likely to take initiative, handle challenges effectively, and contribute positively to their organization's success.

From PHEIs perspective, where roles often required autonomy and problem-solving skills, fostering self-efficacy among employees was particularly important. As highlighted by Rossiandy and Indradewa (2023), individuals with high self-efficacy were more effective in their work, better at managing tasks, and more willing to take on additional responsibilities. This, in turn, enhanced their overall contribution to the institution.

The significant relationship between self-efficacy and employee performance observed in this study underscored the importance of building self-efficacy to enhance job performance. This result aligned with the majority of research, reinforcing the idea that self-efficacy was a critical factor in achieving higher levels of performance. By encouraging and developing self-efficacy, PHEIs ensured that their employees were well-equipped to meet the demands of their roles, ultimately improving organizational effectiveness.

5.3.4 Research Question 4

Does self-efficacy mediate the relationship between HR practices in terms of training and development, job rotation, career planning and job involvement with employee performance in PHEIs in Sarawak?

5.3.4.1 Self-efficacy mediate the relationship between training and development, and employee performance

H1c: Self-efficacy mediate the relationship between training and development, and employee performance.

The findings for Hypothesis H1c, which examined whether self-efficacy mediated the relationship between training and development (TD) and employee performance (EP), were strongly supported by the data. The results demonstrated that self-efficacy significantly enhanced the impact of training and development on employee performance.

Employees who regularly participated in training programs tended to acquire new skills and knowledge, which increased their confidence in their ability to perform tasks effectively. This boost in self-efficacy then led to improved job performance. The study's results were consistent with previous research that highlighted how training and development programs could significantly enhance self-efficacy, resulting in better performance outcomes (Khaiyal, 2022; Lyons & Bandura, 2022; Saad et al., 2022; Somuah et al., 2024; Zaki et al., 2019).

Training and development programs, such as regular participation in training, periodic assessments of their effectiveness, and a focus on academic and professional growth, played a crucial role in enhancing employees' skills and knowledge. These efforts, particularly when delivered by experienced trainers, significantly boosted employees' self-efficacy, which, in turn, mediated the relationship between training and development and employee performance. Employees with higher self-efficacy, who believed in their ability to manage difficult tasks, contribute to strategic discussions, and set departmental goals, were better equipped to plan tasks effectively, focus on achieving work goals, and tackle

challenges as they arose. This confidence enabled them to embrace difficult situations and handle unpredictability, leading to improved overall performance. Thus, self-efficacy served as a critical link, translating the benefits of training and development into tangible performance outcomes, emphasizing the importance of investing in effective training initiatives.

The study confirmed that self-efficacy mediated the relationship between training and development and employee performance. The findings suggested that by improving self-efficacy through effective training programs, organizations enhanced their employees' performance, supporting the significance of continuous investment in training and development.

5.3.4.2 Self-efficacy mediate the relationship between job rotation and employee performance

H2c: Self-efficacy mediate the relationship between job rotation and employee performance.

The results for Hypothesis H2c, which proposed that self-efficacy mediated the relationship between job rotation (JR) and employee performance (EP), were strongly supported by the data. Job rotation, which involved moving employees through various roles, allowed them to develop a broader range of skills and experiences. This exposure to different tasks and responsibilities helped employees build confidence in their abilities, known as self-efficacy. Research by Ghufran et al. (2022) and Soebandono & Nilawati (2016) supported the idea that job rotation significantly enhanced self-efficacy, leading to improved job performance.

As employees rotated through different roles, they gained valuable insights and experiences that contributed to their professional growth. This growth was reflected in their increased self-efficacy, which enabled them to handle their responsibilities more effectively. Employees who had accumulated experience in different fields through job rotation were more likely to feel capable of managing challenging tasks and contributing meaningfully to strategic discussions. This finding aligned with the research of Soebandono and Nilawati (2016), who found that employees with higher self-efficacy were more effective in their roles.

The enhanced self-efficacy resulting from job rotation played a vital role in improving employee performance. Employees who believed in their capabilities were more likely to approach their tasks with a proactive mindset, effectively plan and execute their work, and tackle challenges with resilience. They were also better equipped to navigate difficult situations and unpredictable challenges, leading to higher overall performance (Ghufran et al., 2022).

The study confirmed that self-efficacy mediated the relationship between job rotation and employee performance. Job rotation not only enhanced employees' skill sets but also strengthened their confidence in applying these skills, which directly contributed to better performance outcomes. This finding highlighted the value of incorporating job rotation as a strategy to develop both the competencies and the self-efficacy of employees, ultimately leading to improved performance within the institution.

5.3.4.3 Self-efficacy mediate the relationship between career planning and employee performance

H3c: Self-efficacy mediate the relationship between career planning and employee performance.

The results for Hypothesis H3c, which proposed that self-efficacy mediated the relationship between career planning (CP) and employee performance (EP), were supported by the data. Career planning, which involved setting clear career paths, aligning personal growth with organizational needs, and establishing goals for professional development, significantly influenced employee performance through the enhancement of self-efficacy.

Employees who had a well-defined career path and set specific goals for their development were more likely to feel confident in their abilities to perform their job responsibilities effectively. This confidence, as reflected in the self-efficacy measures, played a crucial role in how employees approached their work. Employees who believed in their capability to manage difficult tasks or contribute to strategic discussions were better able to plan their tasks, focus on achieving desired outcomes, and tackle challenges as they arose. These behaviors, in turn, led to improved performance.

Research by Dan et al. (2018), Hamzah et al. (2022), and Wulantika and Ayuningtias (2020) aligned with these findings by demonstrating that effective career planning enhanced self-efficacy, which subsequently improved employee performance. Employees who perceived that their career aspirations aligned with the organization's goals were more motivated and better equipped to handle their responsibilities, leading to improved overall performance.

The study confirmed that self-efficacy played a mediating role in the relationship between career planning and employee performance. By assisting employees in setting clear career goals and aligning their growth with organizational objectives, career planning not only increased self-efficacy but also led to better job performance. This emphasizes the importance of career planning as a strategic tool for enhancing both employee confidence and performance outcomes.

5.3.4.4 Self-efficacy mediate the relationship between job involvement and employee performance

H4c: Self-efficacy mediate the relationship between job involvement and employee performance.

The findings for Hypothesis H4c, which proposed that self-efficacy mediated the relationship between job involvement (JI) and employee performance (EP), were supported by the data. Employees who were deeply involved in their work tended to develop a stronger sense of self-efficacy, which, in turn, enhanced their job performance. The study revealed that employees who felt personally invested in their work, actively collaborated with colleagues, and participated in decision-making processes were more likely to build confidence in their abilities. This increased self-efficacy allowed them to handle their responsibilities more effectively and face challenges with greater resilience.

Employees who were highly involved in their work were more likely to feel capable of managing difficult tasks, contributing to strategic discussions, and setting goals within their departments. These feelings of competence, reflected in the self-efficacy measures, translated into better planning, goal achievement, and problem-solving behaviors, all of which were critical for high performance. The relationship between job involvement and

employee performance through self-efficacy was well-supported by previous research (Ali & Wardoyo, 2021; Hadi, 2023; Yusuf, 2024), which showed that employees who were more engaged with their work tended to perform better due to their increased self-efficacy.

The study's findings were consistent with those of Yusuf (2024), who demonstrated that the positive effects of job involvement on performance were significantly enhanced when employees possessed high self-efficacy. This suggested that self-efficacy not only played an independent role in boosting performance but also amplified the impact of job involvement. Conversely, in environments where self-efficacy was low, the benefits of job involvement on performance were diminished (Yusnita, 2021).

In discussing the findings, it was noteworthy that Job Involvement (JI) emerged as the HR practice with the most significant indirect effect on employee performance through the mediation of self-efficacy. The analysis revealed that the path coefficient (β) for the indirect effect of job involvement on employee performance, mediated by self-efficacy, was 0.135. This finding indicated that, among the HR practices examined in this study—training and development, job rotation, career planning, and job involvement—job involvement was the most influential in enhancing employee performance through its impact on self-efficacy.

The significance of job involvement in this context was attributed to the deep psychological engagement it fostered among employees. When employees were highly involved in their work, they were more likely to develop a strong sense of competence and mastery over their tasks. This increased self-efficacy, in turn, empowered them to perform at higher levels, effectively translating their commitment and involvement into tangible performance outcomes. The results highlighted the importance of fostering job involvement within PHEIs as a strategic HR practice, not only for its direct benefits but also for its role

in building employees' confidence in their abilities, which ultimately led to improved performance. This insight held important implications for HR practitioners and policymakers in educational institutions, emphasizing the need to prioritize job involvement as a key component of HR strategies aimed at enhancing overall employee performance.

The study established that self-efficacy serves as a crucial mediator between job involvement and employee performance, with a moderate effect size observed in this direct relationship. Moreover, when considering self-efficacy as a mediator between HR practices and employee performance, the analysis revealed a significant complementary mediation effect. This indicates that while self-efficacy directly enhances employee performance, it also amplifies the positive impact of HR practices on performance, underscoring its pivotal role in optimizing organizational outcomes.

5.4 Research Implications

This section discussed the theoretical and practical research implications of the survey's findings.

5.4.1 Theoretical Implications

This study presented significant theoretical implications for understanding HR practices, employee performance, and the mediating role of self-efficacy, particularly within the context of PHEIs in Sarawak. By addressing existing gaps in the literature, the study advanced theoretical frameworks in several key areas.

Firstly, the study's integration of Social Exchange Theory (SET) and the Ability, Motivation, and Opportunity (AMO) theory provided a robust theoretical framework for understanding the dynamics between HR practices, self-efficacy, and employee

performance. SET offered a theoretical lens through which the reciprocal relationship between HR practices and employee performance was understood, while the AMO theory explained how HR practices enhanced employees' abilities, motivation, and opportunities, with self-efficacy acting as a key psychological mechanism. The integration of these theories advanced theoretical understanding by offering a comprehensive explanation of how HR practices influenced performance through the mediating role of self-efficacy. This theoretical synthesis was particularly relevant for advancing HR theories in the context of higher education.

Secondly, the study enhanced the theoretical understanding of HR practices—specifically training and development, job rotation, career planning, and job involvement—and their impact on employee performance. While previous research often suggested the role of HR practices in improving employee outcomes, there had been limited empirical evidence specifically within the context of PHEIs. This study provided a deeper theoretical perspective by demonstrating how these HR practices, as perceived by employees, significantly influenced their performance. This understanding was particularly relevant as PHEIs in Sarawak increasingly focused on effective HR strategies to boost employee performance. The study's emphasis on employee perceptions added a new dimension to existing theories, suggesting that the subjective experiences of employees regarding HR practices were crucial for understanding performance outcomes.

Thirdly, the study expanded the theoretical framework concerning the relationship between HR practices and self-efficacy. Previous theories recognized the importance of HR practices in developing employee skills and motivation, but the specific impact of these practices on self-efficacy had not been thoroughly explored. This research enriched

theoretical models by empirically demonstrating that HR practices significantly enhanced self-efficacy, which in turn positively influenced employee performance. This finding suggested that self-efficacy should be more prominently integrated into HR-performance models, particularly in educational settings like PHEIs, where empowering employees psychologically was key to achieving better performance outcomes.

Fourthly. the study addressed theoretical gaps regarding the relationship between self-efficacy and employee performance within the context of PHEIs in Sarawak. While self-efficacy had long been recognized as a critical factor in enhancing motivation and performance, its application in higher education settings had been limited. This study provided empirical support for the direct influence of self-efficacy on employee performance, thereby reinforcing theoretical models that positioned self-efficacy as a central construct in performance-related outcomes. The findings suggested that higher self-efficacy led to more effective task planning, problem-solving, and goal achievement, which were crucial components of employee performance in PHEIs.

Additionally, the study provided theoretical insights into the mediating role of self-efficacy between HR practices and employee performance. Previous research often focused on the direct effects of HR practices on performance, but this study theorized and empirically supported the idea that self-efficacy was a crucial mediator. By integrating self-efficacy into the HR-performance relationship, the study offered a more detailed theoretical explanation of how HR practices translated into performance outcomes. This theoretical implication suggested that future HR models should consider self-efficacy not just as an outcome of HR practices but as a mediator that enhanced the effectiveness of these practices in improving performance.

The study's theoretical implications significantly extended the understanding of HR practices and employee performance, particularly through the lens of self-efficacy. By integrating self-efficacy as a mediator in HR-performance models and combining SET and AMO theories, the study provided a more comprehensive theoretical framework. These implications were particularly pertinent for PHEIs in Sarawak, where enhancing employee performance is critical. The study thus offered a solid theoretical foundation for future research and practical applications in HR.

5.4.2 Practical Implications

The study presented practical implications for various stakeholders within higher education institutions. It held significant relevance for policymakers, management, and practitioners in PHEIs in Sarawak and beyond. By offering actionable strategies to enhance employee performance, the findings of this research were particularly pertinent in the context of higher education, where there is an increasing emphasis on accountability, efficiency, and high performance.

Firstly, the study provided practical guidelines for the development and implementation of HR practices that could effectively enhance employee performance. The findings offered policymakers and institutional leaders' evidence-based insights into how tailored HR practices—such as job involvement, training and development, job rotation, and career planning—could be strategically designed to improve employee outcomes. Notably, job involvement had the highest regression with employee performance, followed by training and development, job rotation, and career planning. Therefore, policymakers and institutional leaders need to prioritize these HR practices, especially job involvement, to maximize their impact on employee performance. This focus is particularly important in

educational settings, where the motivation and engagement of staff are critical to achieving organizational success. By adopting these HR practices, PHEIs could better align their human resources strategies with their institutional goals, thereby driving overall performance improvements.

Secondly, the study highlighted the importance of addressing employee performance as a key determinant of organizational effectiveness. The empirical evidence provided in this research demonstrated how HR practices, when effectively implemented, could address underperformance by enhancing employees' self-efficacy. From the analysis, the direct relationship between self-efficacy and employee performance showed the highest coefficient, proving that the selected mediating variable for this study is highly relevant in measuring the contributing factors affecting academic and non-academic staff of PHEIs in Sarawak. This was particularly relevant for these institutions, where maintaining academic excellence and institutional reputation was crucial in an increasingly competitive educational environment. By focusing on mechanisms such as self-efficacy, institutions could cultivate a more confident, capable, and high-performing workforce, which was essential for sustaining their competitive edge.

Thirdly, the study had practical implications for improving staff retention and reducing turnover rates within higher education institutions. By identifying HR practices that directly enhanced employee performance, the research provided a roadmap for creating a more engaging and supportive work environment. This was especially crucial for PHEIs in Sarawak, where high turnover rates could disrupt academic continuity and increase operational costs. The study demonstrated that HR practices such as job involvement, training and development, and career planning contributed to greater job satisfaction and

self-efficacy, which, in turn, enhanced employee retention. Top management and policymakers must prioritize improving job involvement, as it has the strongest relationship with both employee performance and self-efficacy. By focusing on job involvement, institutions can foster a deeper sense of commitment and engagement among staff, leading to improved performance and retention. To achieve this, strategies for implementing job involvement within PHEIs should include creating opportunities for employees to actively participate in decision-making, offering more autonomy in their roles, and designing job tasks that enhance employee ownership and responsibility. By investing in these practices, institutions can foster a more committed workforce, ensuring stability and continuity in delivering educational services while reducing the costs associated with frequent employee turnover.

Fourthly, the study emphasized the importance of leadership development in higher education settings. By revealing the role of self-efficacy as a mediator between HR practices and employee performance, the research highlighted the need for institutional leaders to not only implement HR strategies but also actively support the development of leadership capabilities among staff. The analysis showed that the mediating effect of self-efficacy on the relationship between job involvement and employee performance had the strongest coefficient, followed by training and development, career planning, and job rotation. This finding underscored the importance of prioritizing job involvement, as it plays a critical role in enhancing both self-efficacy and performance. To ensure effective leadership development, HR departments must review and update policies related to job involvement, as these directly impact staff engagement. Educational leaders who understand the significance of self-efficacy in driving performance are better equipped to inspire and guide their teams. The study offered practical insights for cultivating a leadership culture that

emphasizes empowerment, collaboration, and shared responsibility, ultimately fostering a work environment conducive to sustained performance improvements and organizational success in PHEIs. This leadership development approach is vital for institutions aiming to navigate the complex and evolving challenges in higher education.

Finally, the study presented broader implications for policymakers, such as the Ministry of Higher Education (MOHE) and the Malaysian Qualifications Agency (MQA), in shaping policies that drive continuous professional development (CPD) and career progression within PHEIs. For instance, policymakers may consider increasing the required CPD hours beyond the current 40 hours per year, ensuring that these activities are directly relevant to staff members' job scopes. Additionally, PHEIs could make better use of the Human Resource Development Corporation (HRD Corp) levy to upskill and reskill both academic and non-academic staff, enhancing their capabilities and job performance. Policymakers should also focus on developing more robust career progression policies, which should be monitored both internally and by external authorities like MOHE and MQA during audits. Job rotation, particularly for non-academic staff, should be implemented as a strategic tool to ensure staff members gain comprehensive knowledge of different departments. However, this requires the development and implementation of proper policies to support structured job rotation programmes. By addressing these areas, PHEIs can foster a more capable, versatile, and committed workforce, which is essential for achieving sustained success in the dynamic higher education landscape.

Implementing job rotation strategies in PHEIs in Sarawak can significantly enhance the professional development of academic staff. By encouraging faculty members to take on administrative roles such as program heads or deans, institutions provide opportunities for

educators to gain leadership experience and a comprehensive understanding of institution operations. This approach not only broadens their skill sets but also fosters a more adaptable and versatile academic workforce. Additionally, systematically rotating faculty through various roles and departments promotes flexibility, reduces monotony, and equips employees with a holistic view of the organization's functions. Such strategies contribute to increased job performance and prepare staff for future leadership positions within the institution.

The practical implications of this study were significant and well-justified. The findings not only contributed to the body of knowledge on HR practices in higher education but also offered actionable recommendations for improving employee performance in both private and public educational institutions. These insights were crucial for guiding HR policy and practice, ensuring that PHEIs in Sarawak could meet the demands of a dynamic and challenging educational landscape.

5.5 Limitations of the Study

In this study, several limitations were acknowledged, which may have implications for the generalizability and interpretation of the findings. Firstly, the research employed a cross-sectional design, capturing data at a single point in time. While this approach allowed for the examination of relationships between variables, it did not enable the analysis of changes over time or the establishment of causality. Consequently, the dynamic nature of HR practices and their long-term effects on employee performance may not have been fully captured.

This study focused on key HR practices, including training and development, job rotation, career planning, and job involvement, while excluding performance appraisal,

compensation management, and work-life balance to maintain a clear research scope. Performance appraisals often face issues of fairness and effectiveness, compensation management is influenced by external economic factors, and work-life balance covers a broad range of personal and organizational practices, which could dilute the study's focus. By emphasizing specific HR practices linked to professional growth and engagement, the study aimed to provide more precise insights into their impact on employee performance. The exclusion of these additional practices may have limited the comprehensiveness of the findings, as other important factors influencing employee performance were not considered.

Thirdly, the data collection method relied on self-report assessments, which were dependent on participants' perceptions and were subject to biases such as social desirability and recall bias. Although self-report measures are widely used in HR research, they may not always accurately reflect actual behaviors or outcomes. This reliance on self-reported data may have affected the validity of the findings.

Fourthly, the study was conducted exclusively within the context of PHEIs in Sarawak. The study's exclusive focus on PHEIs in Sarawak was strategically chosen in light of the Sarawak government's plan to implement free tertiary education at state-owned universities starting in 2026. This policy aims to make higher education accessible to all Sarawakians, fostering a highly skilled workforce to drive the state's socio-economic growth. However, this initiative could pose challenges to the sustainability of PHEIs, as they might face increased competition from tuition-free public institutions. By concentrating on PHEIs in Sarawak, the study seeks to provide insights into how these institutions can adapt and thrive amidst the evolving educational landscape shaped by the government's free education policy. While the findings offered valuable insights specific to this setting, they may not be

generalizable to PHEIs in other regions. This focus on a particular type of institution may have limited the broader applicability of the results.

Fifthly, the study examined self-efficacy as the primary mediator between HR practices and employee performance. The study selected self-efficacy as the primary mediator between HR practices and employee performance due to its foundational role in influencing various work-related outcomes. By focusing on self-efficacy, the study aimed to explore how HR practices empower employees to feel competent and effective in their roles. While self-efficacy was identified as a significant mediator, other potential mediators, such as organizational commitment, job satisfaction, and work engagement, were not considered. The exclusion of these additional mediators may have limited the understanding of the full range of mechanisms through which HR practices influence employee performance.

5.6 Recommendations for Future Research

Based on the limitations identified in this study, several avenues for future research were recommended to enhance the understanding of the relationship between HR practices, self-efficacy, and employee performance within the context of PHEIs.

Firstly, future research was advised to consider adopting a longitudinal research design to address the limitations associated with the cross-sectional approach used in this study. A longitudinal design would enable researchers to track changes in HR practices, self-efficacy, and employee performance over time, providing deeper insights into the causal relationships between these variables. By observing these dynamics over extended periods, future studies could more effectively capture the long-term effects of HR interventions and how they evolve, offering a more comprehensive understanding of how sustained changes in HR practices influence employee performance.

Secondly, expanding the scope of HR practices examined in future studies was identified as crucial for providing a more holistic understanding of their impact on employee performance. While this study focused on training and development, job rotation, career planning, and job involvement, other important HR practices such as performance appraisal, compensation management, and work-life balance were not included. Future research should incorporate these additional HR practices to explore their potential effects and interactions with those already studied. Policymakers play a critical role in promoting these HR practices within higher education institutions by developing supportive policies and providing necessary resources. By broadening the range of HR practices examined, future research can offer a more holistic view of how various strategies contribute to employee performance, particularly in the diverse and complex environments of higher education institutions.

Thirdly, addressing the reliance on self-report assessments was another critical recommendation for future research. While self-reported data provided valuable insights into employees' perceptions and experiences, it was also susceptible to biases that could affect the validity of the findings. Future studies should consider combining self-report data with more objective measures, such as supervisor evaluations, peer assessments, or organizational records of employee performance. This multi-method approach would enhance the robustness of the findings by providing a more accurate and comprehensive assessment of the relationships between HR practices, self-efficacy, and performance outcomes.

Fourthly, future research should have explored the generalizability of the findings by extending the study to other types of higher education institutions, including public universities and PHEIs in different regions or countries. A broader scope would have helped determine whether the relationships observed in this study held true across different

organizational contexts and cultural settings. Comparative studies between private and public institutions could also have highlighted the specific challenges and opportunities each type of institution encountered when implementing effective HR practices.

Fifthly, future studies should have investigated additional mediators that may have influenced the relationship between HR practices and employee performance. While this study focused on self-efficacy as a mediator, other factors such as organizational commitment, job satisfaction, and work engagement could also have played significant roles in this relationship. By exploring these additional mediators, future research could have provided a more detailed understanding of the mechanisms through which HR practices impacted performance, thereby offering more targeted recommendations for HR strategy development.

5.7 Chapter Summary

This study concluded the examination of the factors that influenced employee performance in Sarawak's Private Higher Education Institutions (PHEIs) by employing Social Exchange Theory (SET) along with the Ability, Motivation, and Opportunity (AMO) theory. It synthesized the research outcomes, focusing on the relationships between human resource management (HR) practices, self-efficacy, and employee performance within PHEIs in Sarawak.

The findings revealed significant positive relationships between specific HR practices—training and development, job rotation, career planning, and job involvement—and employee performance. The study also confirmed that self-efficacy played a crucial mediating role in these relationships, illustrating how self-efficacy enhanced the effectiveness of HR practices in improving employee performance. These insights

contributed to the existing literature by demonstrating how targeted HR strategies were effectively employed to foster better performance outcomes in educational settings.

The theoretical implications of the study were explored, highlighting its contribution to the HR literature by integrating self-efficacy as a mediator in the HR-performance link. This approach provided a more detailed theoretical framework that clarified the mechanisms through which HR practices impacted employee performance. The research addressed gaps in the literature, particularly within the context of PHEIs, where the connection between HR practices, self-efficacy, and performance had not been extensively studied. By employing Social Exchange Theory (SET) and the Ability, Motivation, and Opportunity (AMO) theory, the study deepened the understanding of these complex dynamics, providing a solid foundation for further research.

On the practical side, the findings offered actionable insights for policymakers, institutional leaders, and HR professionals in PHEIs. The results suggested that well-designed HR practices significantly improved employee performance by enhancing self-efficacy. This was especially relevant for PHEIs in Sarawak, where there was a strong need to uphold high standards of academic excellence and maintain institutional reputation. The study provided practical recommendations for developing HR strategies that not only boosted performance but also created an environment that supported the development of self-efficacy among employees.

This study acknowledged certain limitations, including the cross-sectional design, the narrow focus on specific HR practices, reliance on self-reported data, and the exclusive examination of PHEIs in Sarawak. These limitations potentially affected the generalizability of the findings and limited the ability to establish causal relationships. Nonetheless, the

research provided a solid foundation for further investigation into the HR-performance relationship, particularly within the higher education sector.

Recommendations for future research were presented, suggesting the adoption of longitudinal studies, the inclusion of a broader range of HR practices, the use of objective performance measures, and the examination of additional mediators in the relationship between HR practices and employee performance. Further research was encouraged to explore these relationships in different types of educational institutions and to integrate a wider range of theoretical perspectives. These suggestions aimed to build on the current study's findings and deepen the understanding of how HR practices influenced employee performance.

This summary integrated the key contributions of the study, outlining its theoretical and practical relevance, addressing its limitations, and offering a path for future research. The findings from this study were expected to inform HR practices within PHEIs and contribute to the ongoing academic discussion in the field of human resource management. By recognizing and addressing the complexities identified in this study, higher education institutions could refine their HR strategies and practices to better align with the unique challenges of the educational environment, ultimately fostering a culture of continuous improvement, enhanced employee performance, and long-term institutional sustainability.

REFERENCES

Abd Rashid, I. M., Zaini, M. R., Roni, M., Adanan, A., Faisal, S. I., & Jamil, M. F. (2022). Job rotation as a leadership development tool in Malaysia education sector. *International Journal of Academic Research in Business and Social Sciences, 12*(12).381-388. https://doi.org/10.6007/ijarbss/v12-i12/15344

Abdul Rahim Zumrah, Kalsom Ali, & Ahmad Najaa' Mokhtar. (2022). The Effect of Human Resource Management Practices on Motivation to Transfer: Evidence from the Malaysian Public Sector. *International Journal of Business and Society, 23*(3), 1618–1631. https://doi.org/10.33736/ijbs.5187.2022

Abdullahi, M. S., Adeiza, A., Abdelfattah, F., Fatma, M., Fawehinmi, O., & Aigbogun, O. (2022). Talent management practices on employee performance: A mediating role of employee engagement in institution of higher learning: quantitative analysis. *Industrial and Commercial Training, 54*(4), 589-612. https://doi.org/10.1108/ict-10-2021-0075

Abugre, J. B., & Nasere, D. (2020). Do high-performance work systems mediate the relationship between HR practices and employee performance in multinational corporations (MNCs) in developing economies? *African Journal of Economic and Management Studies, 11*(4), 541-557. https://doi.org/10.1108/ajems-01-2019-0028

Abun, D., Nicolas, M. T., Apollo, E., Magallanes, T., & Encarnacion, M. J. (2021). Employees' self-efficacy and work performance of employees as mediated by work environment. *International Journal of Research in Business and Social Science* (2147- 4478), 10(7), 01-15. https://doi.org/10.20525/ijrbs.v10i7.1470

Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology, 60*(1), 451-474. https://doi.org/10.1146/annurev.psych.60.110707.163505

Aguinis, H., & Pierce, C. A. (2008). Enhancing the relevance of organizational behavior by embracing performance management research. *Journal of Organizational Behavior, 29*(1), 139-145. https://doi.org/10.1002/job.493

Ahakwa, I., Yang, J., Agba Tackie, E., & Atingabili, S. (2021). The influence of employee engagement, work environment and job satisfaction on organizational commitment and performance of employees: A sampling weights in PLS path modelling. *SEISENSE Journal of Management, 4*(3), 34-62. https://doi.org/10.33215/sjom.v4i3.641

Ahmad, N. S., Juhdi, N., & Fontaine, R. A. (2021). The effect of emotional exhaustion on job involvement among academic administrators in Malaysia. *Advances in Business Research International Journal, 7*(2), 101. https://doi.org/10.24191/abrij.v7i2.14674

Ahmed, N. O.A. (2019). Career commitment: The role of self-efficacy, career satisfaction and organizational commitment. *World Journal of Entrepreneurship, Management and Sustainable Development, 1*(1), 1-27. https://doi.org/10.1108/wjemsd-06-2017-0038

Akhsan, M., Haerani, S., Maupa, H., & Pabo, M. I. (2019). The mediating role of effort in the relationship between job involvement and job performance. A case study of private higher education institutes in eastern Indonesia. *Proceedings of the 3rd International Conference on Accounting, Management and Economics 2018 (ICAME 2018)*. 465-472. https://doi.org/10.2991/icame-18.2019.50

Akkermans, J., Tims, M., Beijer, S., & De Cuyper, N. (2019). Should employers invest in employability? Examining employability as a mediator in the HR - commitment relationship. *Frontiers in Psychology, 10*. Article 717. https://doi.org/10.3389/fpsyg.2019.00717

Akkermans, J., Tomlinson, M., & Anderson, V. (2023). Initial employability development: introducing a conceptual model integrating signalling and social exchange mechanisms. *European Journal of Work and Organizational Psychology, 33*(1), 54–66. https://doi.org/10.1080/1359432X.2023.2186783

Aktar, S. (2023). The effect of training and development methods on employee satisfaction and performance in commercial banks. *Management Dynamics in the Knowledge Economy, 11*(1), 30-47. https://doi.org/10.2478/mdke-2023-0003

Akter, S., D'Ambra, J., & Ray, P. (2011). Trustworthiness in mHealth information services: an assessment of a hierarchical model with mediating and moderating effects using partial least squares (PLS). *Journal of the American Society for Information Science and Technology, 62*(1), 100-116.

Al-Ajarmeh, D. O., Rayan, A. H., Eshah, N. F., & Al-Hamdan, Z. M. (2022). Nurse–nurse collaboration and performance among nurses in intensive care units. *Nursing in Critical Care, 27*(6), 747-755.

Al-Kazlah, S. A., & Badkook, R. O. (2022). The effect of human resource management practices on employees' motivation and creativity in the private sector of Saudi Arabia. *International Review of Management and Marketing, 12*(4), 1-9. https://doi.org/10.32479/irmm.13215

Al-Mottahar, T. M., & Pangil, F. B. (2021). Exploring ways on enhancing transfer of training: A review of tested theories on transfer of training. *European Scholar Journal, 2*(10), 103-109.

Al-refaei, A. A. (2021). An empirical investigation of the effect of training and development on organizational commitment in higher education sector. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4128090

Al-refaei, A. A., Ali, H. B., Ateeq, A. A., & Alzoraiki, M. (2023). An integrated mediating and moderating model to improve service quality through job involvement, job satisfaction, and organizational commitment. *Sustainability, 15*(10), 7978. https://doi.org/10.3390/su15107978

Al-Romeedy, B. S. (2019). The role of job rotation in enhancing employee performance in the Egyptian travel agents: The mediating role of organizational behavior. *Tourism Review, 74*(4), 1003-1020. https://doi.org/10.1108/tr-10-2018-0153

Al-Tit, A. A. (2020). The impact of AMO-HR systems on proactive employee behavior: The mediating contribution of leader-member and team-member exchange. *International Journal of Engineering Business Management, 12*, 184797902094723. https://doi.org/10.1177/1847979020947236

Al-Zoubi, M. O., Masa'deh, R., & Twaissi, N. M. (2022). Exploring the relationship among structured-on-the job training, mentoring, job rotation, work environment factors and tacit knowledge transfer. *VINE Journal of Information and Knowledge Management Systems, 55*(1), 240-267. https://doi.org/10.1108/vjikms-06-2022-0199

Alaflaq, S., Aloqab, A., & Al-Dakhli, A. (2024). The influence of job rotation on employee performance in the Syrian Nour Foundation. *CARC Research in Social Sciences, 3*(1) 49-55. https://doi.org/10.58329/criss.v3i1.94

Alam, A. (2022). Impact of University's human resources practices on professors' occupational performance: Empirical evidence from India's higher education sector. *Palgrave Studies in Democracy, Innovation, and Entrepreneurship for Growth*, 107-131. https://doi.org/10.1007/978-3-031-12217-0_6

Alam, M. J., Shariat Ullah, M., Islam, M., & Chowdhury, T. A. (2024). Human resource management practices and employee engagement: the moderating effect of supervisory role. *Cogent Business & Management, 11*(1). 2318802. https://doi.org/10.1080/23311975.2024.2318802

Alamri, M. S., & Al-Duhaim, T. I. (2017). Employees perception of training and its relationship with organizational commitment among the employees working at Saudi industrial development fund. *International Journal of Business Administration, 8*(2), 25-39. https://doi.org/10.5430/ijba.v8n2p25

Albrecht, S. L., Furlong, S., & Leiter, M. P. (2023). The psychological conditions for employee engagement in organizational change: Test of a change engagement model. *Frontiers in psychology, 14*, 1071924. https://doi.org/10.3389/fpsyg.2023.1071924

Alfes, K., Truss, C., Soane, E. C., Rees, C., & Gatenby, M. (2013b). The Relationship Between Line Manager Behavior, Perceived HR Practices, and Individual Performance: Examining the Mediating Role of Engagement. *HR, 52*(6), 839-859. doi: 10.1002/HR.21512

Ali, F., & Wardoyo, D. T. (2021). Pengaruh self efficacy terhadap Kinerja Karyawan dengan Kepuasan Kerja sebagai Variabel intervening (Studi PT. Ultrajaya milk industry, Tbk Surabaya Bagian marketing). *Jurnal Ilmu Manajemen, 9*(1), 367. https://doi.org/10.26740/jim.v9n1.p367-379

Alizadeh Majd, A., Bell, R., Ali, S., Davoodi, A., & Nasirifar, A. (2024). The effect of job rotation on employee performance: The mediating role of HR strategy and training in the petrochemical industry. *Industrial and Commercial Training, 56*(2), 93-105. https://doi.org/10.1108/ict-10-2023-0074

Aljehani, R., & Javed, U. (2021). Relationship between career development and employee loyalty. *PalArch's Journal of Archaeology of Egypt/Egyptology, 18*(14), 123-134.

Alkhalailah, R., & Mjlae, S. (2023). The Influence of Human Resource Management Practices on Employee Performance: A case study of Al-Balqa Applied University. *Problems and Perspectives in Management, 21*(1), 279-290. https://doi.org/10.21511/ppm.21(1).2023.24

Amin, M., Wan Ismail, W. K., Abdul Rasid, S. Z., & Selemani, R. D. (2014). The impact of human resource management practices on performance: Evidence from a Public University. *The TQM Journal, 26*(2), 125-142. https://doi.org/10.1108/TQM-10-2011-0062

Amir, A. (2021). *Employees resign on salary dissatisfaction, lack of career progression, says Mercer*. [online] Available at: https://themalaysianreserve.com/2021/10/15/employees-resign-on-salary-dissatisfaction-lack-of-career-progression-says-mercer/ [Accessed on 18 December 2024]

Ampong, I. (2024). Assessing the effect of employee welfare and compensation on organizational performance: a case of Sahel Sahara Bank Ghana limited. *Cogent Business & Management, 11*(1), 231-246. https://doi.org/10.1080/23311975.2024.2315690

Anghel, C. M., & Almasan, A. I. (2024). Human resource management in public health: Strategies and best practices for effective healthcare delivery. *Proceedings of the International Management Conference*, *17*(1), 625-634. https://doi.org/10.24818/imc/2023/04.07

Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). Manufacturing advantage: Why high-performance work systems pay off. *Contemporary Sociology, 30*(3), 250-251. https://doi.org/10.2307/3089250

Arasanmi, C. N., & Krishna, A. (2019). Employer branding: Perceived organisational support and employee retention – the mediating role of organisational commitment. *Industrial and Commercial Training, 5*1(3), 174-183. https://doi.org/10.1108/ict-10-2018-0086

Arif, M., Arsad, S., & Abdullah, M. B. (2022). The effect of managerial ability and career planning on job satisfaction and its impact on employee performance. *International Journal of Economics Development Research (IJEDR), 3*(1), 36-50. https://doi.org/10.37385/ijedr.v3i1.402

Arhipova, O., & Kokina, I. (2022). Managers' self-development in the context of career growth. *Society. Integration. Education. Proceedings of the International Scientific Conference, 1*, 698-709. https://doi.org/10.17770/sie2022vol1.6847

Armstrong, M., & Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.

Arulsamy, A. S., Indira, S., Senthil, K., Jetal, J. P., & Bajaj, K. K. (2023). Employee Training and Development Enhancing Employee Performance – A Study. *Samdarshi, 16*(3), 406.

Azmy, A. (2019). Employee engagement factors in a higher education institution. *Binus Business Review, 10*(3), 187-200. https://doi.org/10.21512/bbr.v10i3.5857

Bagia, I. W., Cipta, W., & Suci, N. M. (2020). The influence of job involvement, job characteristics and organizational commitment on the employee's performance of district government. *Proceedings of the 5th International Conference on Tourism, Economics, Accounting, Management and Social Science (TEAMS 2020)*, 50-55. https://doi.org/10.2991/aebmr.k.201212.007

Balnaves, M., & Caputi, P. (2001). *Introduction to quantitative research methods: An investigative approach*. SAGE.

Bandura, A. (1997). *Self-Efficacy. The Exercise of Control*. New York W.H. Freeman and Company.

Bastian, A., & Widodo, W. (2022). How innovative behavior affects lecturers' task performance: A mediation perspective. *Emerging Science Journal, 6*, 123-136. https://doi.org/10.28991/esj-2022-sied-09

Basyir, M. (2019). Pengaruh Efikasi Diri, Budaya Organisasi dan Kepuasan Kerja terhadap Kinerja Pegawai Negeri Sipil Sekretariat Daerah Kabupaten Gayo Lues. *Jurnal Ilmiah Mahasiswa Ekonomi Manajemen, 4*(3), 422-433.

Batista, A., & Francisco, A. (2018). Organizational sustainability practices: A study of the firms listed by the corporate sustainability index. *Sustainability, 10*(1), 226. https://doi.org/10.3390/su10010226

Bell, E., Bryman, A., & Harley, B. (2019). *Business research methods* (5th ed.). Oxford University Press.

Bernama. (2023). *MOHE needs to have good talent development, capacity building plan*. [online] Available at: https://www.bernama.com/en/news.php?id=2194286 [Accessed on 18 December 2024]

Bhati, K., & Sethy, T. P. (2022). Self-efficacy: Theory to educational practice. *The International Journal of Indian Psychology, 10*(1), 1123-1128. https://doi:10.25215/1001.112

Biswas, S., & Bhatnagar, J. (2013). Mediator analysis of employee engagement: Role of perceived organizational support, P-O fit, organizational commitment and job Satisfaction. *The Journal for Decision Makers, 38*(1), 27-40. https://doi.org/10.1177/0256090920130103

Blau, P. M. (1964). Justice in social exchange. *Sociological Inquiry, 34*(2), 193-206. https://doi.org/10.1111/j.1475-682x.1964.tb00583.x

Bonache, J., & Festing, M. (2020). Research paradigms in international human resource management: An epistemological systematisation of the field. *German Journal of Human Resource Management, 34*(2), 99-123. https://doi.org/10.1177/2397002220909780

Bond, T. G., & Fox, C. M. (2013). *Applying the Rasch model: Fundamental measurement in the human sciences* (2nd ed.). Psychology Press.

Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance, 10*(2), 99-109. https://doi.org/10.1207/s15327043hup1002_3

Borneo Post. (2024, August 29). *Free tertiary education not for all courses, Sagah reiterates*. [online] Available at:

https://meitd.sarawak.gov.my/web/subpage/news_view/1855 [Accessed on 18 December 2024]

Bos-Nehles, A., Riemsdijk, M. J., & Looise, J. K. (2013). Employee perceptions of line management performance: Applying the AMO theory to explain the effectiveness of line managers' HR implementation. *Human Resource Management, 52*(6), 861-877. https://doi.org/10.1002/HR.21578

Bos-Nehles, A., Townsend, K., Cafferkey, K., & Trullen, J. (2023). Examining the ability, motivation and opportunity (AMO) framework in HR research: Conceptualization, measurement and interactions. *International Journal of Management Reviews, 25*(4), 725-739. https://doi.org/10.1111/ijmr.12332

Boxall, P. (2003). HR strategy and competitive advantage in the service sector. *Human Resource Management Journal, 13*(3), 5-20. https://doi.org/10.1111/j.1748-8583.2003.tb00095.x

Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: Developing taxonomy, themes, and theory. *Health Services Research, 42*(4), 1758-1772. https://doi.org/10.1111/j.1475-6773.2006.00684.x

Brenya, R., Weijun, C., & Kipkemboi, R. B. (2018). Factors Affecting the Academic Staff and Their Impact on the University: A Case Study of NUIST. *Educational Research International*, 71-82.

Brooke, J., Rasdi, R. M., & Samah, B. A. (2018). Mediation test for self-efficacy on the relationship between individual-related factors and knowledge sharing behaviour among Malaysian farmers. *International Journal of Academic Research in Business and Social Sciences, 7*(14), 550-563. https://doi.org/10.6007/ijarbss/v7-i14/3688

Burić, I., & Moè, A. (2020). What makes teachers enthusiastic: The interplay of positive affect, self-efficacy and job satisfaction. *Teaching and Teacher Education, 89*, 103008. https://doi.org/10.1016/j.tate.2019.103008

Byrne, B. M. (2016). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming* (3rd ed.). Routledge. https://doi.org/10.4324/9781315757421

Caliskan, A., & Koroglu, E. O. (2022). Job performance, task performance, contextual performance: development and validation of a new scale. *Uluslararası İktisadi ve İdari Bilimler Dergisi, 8*(2), 180-201. https://doi.org/10.29131/uiibd.1201880

Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 687–732). Consulting Psychologists Press.

Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993). A theory of performance. In E. Schmitt, W. C. Borman, & Associates (Eds.), Personnel selection in organizations(pp. 35–70). San Francisco: Jossey-Bass

Carter, W. R., Nesbit, P. L., Badham, R. J., Parker, S. K., & Sung, L. K. (2018). The effects of employee engagement and self-efficacy on job performance: A longitudinal field study. *The International Journal of Human Resource Management, 29*(17), 2483-2502. https://doi.org/10.1080/09585192.2016.1244096

Cetin, F., & Askun, D. (2018). The effect of occupational self-efficacy on work performance through intrinsic work motivation. *Management Research Review, 41*(2), 186-201. https://doi.org/10.1108/mrr-03-2017-0062

Chan, C. C. (2018). The relationship among social support, career self-efficacy, career exploration, and career choices of Taiwanese college athletes. *Journal of Hospitality, Leisure, Sport & Tourism Education, 22*, 105-109. https://doi.org/10.1016/j.jhlste.2017.09.004

Chan, C. C. (2020). Factors Affecting Career Goals of Taiwanese College Athletes from Perspective of Social Cognitive Career Theory. *Journal of Career Development, 47*(2), 193-206. https://doi.org/10.1177/0894845218793234

Chanda, U., & Goyal, P. (2019). A Bayesian network model on the interlinkage between Socially Responsible HR, employee satisfaction, employee commitment and organizational performance. *Journal of Management Analytics, 7*(1), 105–138. https://doi.org/10.1080/23270012.2019.1650670

Chandra, A., & Lobo, A. L. (2024). Unlocking organizational excellence: The impact of HR practices on employee performance across sector. *Proceedings of the 3rd International Conference on Reinventing Business Practices, Start-ups and Sustainability (ICRBSS 2023)*, 715-723. https://doi.org/10.2991/978-94-6463-374-0_61

Charbonnier-Voirin, A., & Roussel, P. (2012). Adaptive performance: A new scale to measure individual performance in organizations. *Canadian Journal of Administrative Sciences, 29*(3), 280-293. https://doi.org/10.1002/cjas.232

Chau, C. (2022, September 1). *Employees in Malaysia lack training opportunities*. HR Asia. https://HRasia.com/employees-in-malaysia-lack-training-opportunities/

Chemutai, L. P., & Khalili, O. E. (2022). Influence of staff training and development on academic performance of lecturers at Rongo University, Kenya. *International Academic Journal of Social Sciences and Education (IAJSSE), 2*(3), 74-93.

Cherotich, S., Rop, W., & Bett, A. (2021). The relationship between job rotation and employee performance in level-four hospitals within the south-rift region in Kenya. *International Journal of Scientific and Research Publications (IJSRP), 11*(9), 139-145. https://www.ijsrp.org/research-paper-0921/ijsrp-p11718.pdf

Chin, W. W. (1998). Commentary: Issues and Opinion on Structural Equation Modeling. *MIS Quarterly, 22*(1), vii–xvi. http://www.jstor.org/stable/249674

Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology, 64*(1), 89-136. https://doi.org/10.1111/j.1744-6570.2010.01203.x

Chuang, Y. S., Hu, Y. C., & Lee, P. C. (2018). The effect of coaching and team effectiveness on job involvement for logistics industry company. *Management Studies, 6*(2), 96-107. https://doi.org/10.17265/2328-2185/2018.02.002

Chughtai, A. A. (2008). Impact of job involvement on in-role job performance and organizational citizenship behaviour. *Journal of Behavioral and Applied Management, 9*(2), 169-183. https://doi.org/10.21818/001c.17123

Clark, J., & Causer, G. (2020). Introduction: Research strategies and decisions. *Handbook for Research Students in the Social Sciences*, 163-176. https://doi.org/10.4324/9781003070993-17

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155-159. https://doi.org/10.1037//0033-2909.112.1.155

Cohen, J. (1998). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Creswell, J. W. (1994). *Research design*. Thousand Oaks, CA: Sage.

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

Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals, 11*(1), 479-516. https://doi.org/10.5465/annals.2015.0099

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management, 31*(6), 874–900. https://doi.org/10.1177/0149206305279602

Culibrk, J., Delic, M., Mitrovic, S., & Culibrk, D. (2018). Job satisfaction, organizational commitment and job involvement: The mediating role of job involvement. *Frontiers in Psychology, 9*. https://doi.org/10.3389/fpsyg.2018.00132

Dan, X., Xu, S., Liu, J., Hou, R., Liu, Y., & Ma, H. (2018). Relationships among structural empowerment, innovative behaviour, self-efficacy, and career success in nursing field in Mainland China. *International Journal of Nursing Practice, 24*(5), 1-9. https://doi.org/10.1111/ijn.12674

Davies, F., & Gould-Williams, J. S. (2005). Using social exchange theory to predict the effects of HR practice on employee outcomes: An Analysis of Public Sector Workers. *Public Management Review, 7*(1), 1-24. https://doi.org/10.1080/1471903042000339392

De Clercq, D., Haq, I. U., & Azeem, M. U. (2019). Workplace ostracism and job performance: Roles of self-efficacy and job level. *Personnel Review, 48*(1), 184-203. https://doi.org/10.1108/pr-02-2017-0039

Decramer, A., Smolders, C., Vanderstraeten, A., & Christiaens, J. (2012). The impact of institutional pressures on employee performance management systems in higher

education in the Low Countries. *British Journal of Management, 23*(S1), S88-S103. https://doi.org/10.1111/j.1467-8551.2012.00820.x

Demir, S. (2020). The role of self-efficacy in job satisfaction, organizational commitment, motivation and job involvement. *Eurasian Journal of Educational Research, 20*(85), 205-224. https://doi.org/10.14689/ejer.2020.85.10

Denzin, N. K., & Lincoln, Y. S. (2000). *The handbook of qualitative research*. Sage.

Devika, C. P., Yuliatin, A., Isti, F., & Sumani. (2021). The Effect of Career Planning and Work Discipline on Freelencer Performance with Psychological Contracts as Intervening Variable. *International Journal of Scientific Development and Research (IJSDR), 6*(12), 166-171. https://ijsdr.org/papers/IJSDR2112024.pdf

Diamantidis, A. D., & Chatzoglou, P. (2019). Factors affecting employee performance: An empirical approach. *International Journal of Productivity and Performance Management, 68*(1), 171-193. https://doi.org/10.1108/ijppm-01-2018-0012

Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management, 17*(4), 263-282. https://doi.org/10.1111/j.1467-8551.2006.00500.x

Dongrey, R., & Rokade, V. (2022). A framework to assess the impact of employee perceived equality on contextual performance and mediating role of affective commitment to enhance and sustain positive work behavior. *Discrete Dynamics in Nature and Society, 2022*, 1-14. https://doi.org/10.1155/2022/5407947

Dreyfus, D., Nair, A., & Talluri, S. (2020). The impact of chain organization size on efficiency and quality of affiliated facilities—Implications for multi-unit

organizational forms. *Production and Operations Management, 29*(7), 1605-1623. https://doi.org/10.1111/poms.13177

MIDA. (2024). *Education Services*. [online] Available at: https://www.mida.gov.my/industries/services/education-services/ [Accessed on 18 December 2024]

Edwards, J. R. (2001). Multidimensional constructs in organizational behavior research: An integrative analytical framework. *Organizational Research Methods, 4*(2), 144-192. https://doi.org/10.1177/109442810142004

Elrayah, M., & Semlali, Y. (2023). Sustainable total reward strategies for talented employees' sustainable performance, satisfaction, and motivation: Evidence from the educational sector. *Sustainability, 15*(2), 1605. https://doi.org/10.3390/su15021605

Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology, 2*(1), 335-362. https://doi.org/10.1146/annurev.so.02.080176.002003

Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments & Computers, 28*(1), 1–11. https://doi.org/10.3758/BF03203630

Erum, H., Abid, G., Contreras, F., & Islam, T. (2020). Role of family motivation, workplace civility and self-efficacy in developing affective commitment and organizational citizenship behavior. *European Journal of Investigation in Health, Psychology and Education, 10*(1), 358-374. https://doi.org/10.3390/ejihpe10010027

Esteban-Lloret, N. N., Aragón-Sánchez, A., & Carrasco-Hernández, A. (2016). Determinants of employee training: impact on organizational legitimacy and organizational performance. *The International Journal of Human Resource Management, 29*(6), 1208–1229. https://doi.org/10.1080/09585192.2016.1256337

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149-1160. https://doi.org/10.3758/brm.41.4.1149

Ferrari, F. (2022). Skills mismatch and change confidence: The impact of training on change recipients' self-efficacy. *European Journal of Training and Development, 47*(10), 69-90. https://doi.org/10.1108/ejtd-06-2021-0072

Field, A. P. (2015). *Discovering statistics using IBM SPSS statistics: And sex and drugs and rock 'N' roll,* Sage.

Finney, S. J., & DiStefano, C. (2013). Non-Normal and Categorical Data in Structural Equation Modeling. In G. R. Hancock, & R. O. Mueller (Eds.), *Structural Equation Modeling: A Second Course* (2nd ed., pp. 439-492). Charlotte, NC: Information Age Publishing.

Florence, W. W., Susan, W., & Gregory, N. (2020). Relationship between career management strategies and employee performance in state corporations in Kenya. *International Journal of Social Sciences and Information Technology, 7*(4), 1674-1691. https://doi.org/10.61426/sjbcm.v7i4.1989

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39. https://doi.org/10.2307/3151312

Gabriel, P. I., Biriowu, C. S., & Dagogo, E. L. (2020). Examining succession and replacement planning in work organizations. *European Journal of Business and Management Research, 5*(2), 1-7. https://doi.org/10.24018/ejbmr.2020.5.2.192

Galos, S., & Aldridge, J. M. (2021). Relationships between learning environments and self-efficacy in primary schools and differing perceptions of at-risk students. *Learning*

Environments Research, 24(2), 253–268. https://doi.org/10.1007/s10984-020-09323-0

Garaika, G. (2020). Impact of training and competence on performance moderated by the lecturer career development program in Palembang, Indonesia. *International Journal of Economics, Business and Accounting Research (IJEBAR), 4*(03), 10-20. https://doi.org/10.29040/ijebar.v4i03.1158

Gautam, D. K., & Basnet, D. (2022). Training factors for transfer performance: The mediating role of learning performance. *Quest Journal of Management and Social Sciences, 4*(2), 157-171. https://doi.org/10.3126/qjmss.v4i2.50311

Ghahremanloo, M., Hasani, A., Amiri, M., Hashemi-Tabatabaei, M., Keshavarz-Ghorabaee, M., & Ustinovičius, L. (2019). A novel DEA model for hospital performance evaluation based on the measurement of efficiency, effectiveness, and productivity. Engineering Management in Production and Services, 12(1), 7-19. https://doi.org/10.2478/emj-2020-0001

Ghufran, A., Majid, M. S., & Sofyan. (2022). The effect of self-efficiency, work environment, and job rotation on employee engagement and their impact on employee performance of Pt Pupuk Iskandar Muda. *International Journal of Scientific and Management Research, 8*(01), 92-104. https://doi.org/10.37502/ijsmr.2022.5408

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems, 18*(1), 185-214. https://doi.org/10.1080/07421222.2001.11045669

Gopinath, R. (2020). Job involvement and organizational commitment of academic leaders in Tamil Nadu universities–A relationship study with structural equation modeling. *Journal of Critical Reviews*, *7*(19), 1857-1864

Gopinath, R., Yadav, A., Saurabh, S., & Swami, A. (2020). Influence of job satisfaction and job involvement of academicians with special reference to Tamil Nadu Universities. *International Journal of Psychosocial Rehabilitation*, *24*(3), 4296-4306.

Goulart, E. L., Weymer, A. S. Q., & Moreira, V. R. (2022). The influence of self-efficacy on training effectiveness in cooperative organizations. *Revista de Administração da UFSM*, *15*, 331-353. https://doi.org/10.5902/1983465967213

Gould-Williams, J., & Davies, F. (2005). Using social exchange theory to predict the effects of HR practice on employee outcomes. *Public Management Review*, *7*(1), 1-24. https://doi.org/10.1080/1471903042000339392

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Sage Publications, Inc.

Gubicza, G., & Remsei, S. (2024). The Relationship and Conceptual Links Among Job Rotation, Sensemaking and Terminus Tecnicus. In *Economic and Social Development (Book of Proceedings), 109th International Scientific Conference on Economic and Social Development* (p. 25).

Gustari, I., & Widodo, W. (2023). Enhancing employee's contextual performance based on interpersonal skills and creativity. *Jurnal Penelitian Pendidikan Indonesia*, *9*(3), 1465-1472. https://doi.org/10.29210/020233117

Gutterman, A. S. (2023). Organizational performance and effectiveness. *SSRN*. https://dx.doi.org/10.2139/ssrn.4532570

Hadi, P. (2023). The influence of self-efficacy on employee performance mediated by work motivation and work engagement. *International Journal of Research in Business and Social Science (2147- 4478), 12*(2), 653-661. https://doi.org/10.20525/ijrbs.v12i2.2465

Hair, J. F., Babin, B. J., Anderson, R. E., & Black, W. C. (2018). *Multivariate Data Analysis* (8th ed.). Cengage India.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010). *Multivariate Data Analysis*. 7th Edition, Pearson, New York.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). Sage Publications.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (3rd ed.)*. Sage. https://doi.org/10.1007/978-3-030-80519-7

Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P., Ray, S. (2021). *Evaluation of Reflective Measurement Models. In: Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. Classroom Companion: Business*. Springer, Cham. https://doi.org/10.1007/978-3-030-80519-7_4

Hair, J. F., Hult, G. T.M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer Nature.

Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research, 109*, 101-110. https://doi.org/10.1016/j.jbusres.2019.11.069

Hair, J.F., Money, A.H., Page, M. and Samouel, P. (2007). *Research Methods for Business*. West Sussex: John Wiley & Sons.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice, 19*(2), 139-152. https://doi.org/10.2753/mtp1069-6679190202

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

Hakim, L., Purnama, C., Fatmah, D., Rahmah, M., & Rahmah, Z. Z. (2021). Role of organizational citizenship behavior in mediating the relationship between job Involment and job performance. *The International Journal of Business Review (The Jobs Review), 4*(2), 121-132. https://doi.org/10.17509/tjr.v4i2.38932

Halid, H., Kee, D. M., & Rahim, N. F. (2020). Perceived human resource management practices and intention to stay in private higher education institutions in Malaysia: The role of organizational citizenship behaviour. *Global Business Review, 25*(1), 162-179. https://doi.org/10.1177/0972150920950906

Hamzah, S. R., Musa, S. N., & Mohamad, N. (2022). The mediating effect of self-efficacy on career aspiration and organizational support with subjective career success among Malaysian women managers during the COVID-19 pandemic. *Frontiers in Sociology, 7*. https://doi.org/10.3389/fsoc.2022.802090

Harini, S., Luddin, M. R., & Hamidah. (2019). Work Life Balance, Job Satisfaction, Work Engagement and Organizational Commitment Among Lecturer. *Journal of Engineering and Applied Sciences, 14*(7), 2195-2202. https://repository.unida.ac.id/1006/1/201802_JEAS_WLB_14%287%29_2195-2202.pdf

Hasan, A. M., Hishamuddin, M. S., Norashikin, S. H., & Mohd Hamran, M. (2023). Perceived career planning and job satisfaction in Malaysian Armed Forces: The role of career development as a mediator. *International Journal of Management Studies, 30*(2), 337-372. https://doi.org/10.32890/ijms2023.30.2.6

Hatuwe, M., & Muspiha, M. (2023). The effect of career development, performance of Buru Regency food security service government employees. Sang Pencerah: *Jurnal Ilmiah Universitas Muhammadiyah Buton, 9*(1), 77-88. https://doi.org/10.35326/pencerah.v9i1.3015

Hee, O. C., Cheng, T. Y., Yaw, C. C., Gee, W. V., Kamaludin, S. M., & Prabhagaran, J. R. (2016). The Influence of Human Resource Management Practices on Career Satisfaction: Evidence from Malaysia. *International Review of Management and Marketing, 6*(3), 517–521.

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 277-319. https://doi.org/10.1108/s1474-7979(2009)0000020014

Hermawati, A., & Mas, N. (2017). Mediation effect of quality of worklife, job involvement, and organizational citizenship behavior in relationship between transglobal leadership to employee performance. *International Journal of Law and Management, 59*(6), 1143-1158. https://doi.org/10.1108/ijlma-08-2016-0070

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology, 63*, 597–606. https://doi.org/10.1086/222355

Hosen, S., Hamzah, S. R., Arif Ismail, I., Noormi Alias, S., Faiq Abd Aziz, M., & Rahman, M. M. (2024). Training & development, career development, and organizational commitment as the predictor of work performance. *Heliyon*, *10*(1), e23903. https://doi.org/10.1016/j.heliyon.2023.e23903

Huang, B., Sardeshmukh, S., Benson, J., & Zhu, Y. (2022). High performance work systems, employee creativity and organizational performance in the education sector. *The International Journal of Human Resource Management, 34*(9), 1876-1905. https://doi.org/10.1080/09585192.2022.2054283

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal, 20*(2), 195-204. https://doi.org/10.1002/(sici)1097-0266(199902)20:2<195::aid-smj13>3.3.co;2-z

Husainah, N., Muhtadin, I., & Junhanna, I. (2024). The Influence of Competence, Compensation, and Career Development on The Performance of Computer Administrator Employees at The Audit Board of The Republic of Indonesia (BPK RI). *International Journal of Social Health, 3*(1), 17-30.

Irshad, H., Umar, K. M., Rehmani, M., Khokhar, M. N., Anwar, N., Qaiser, A., & Naveed, R. T. (2021). Impact of work-from-Home human resource practices on the performance of online teaching faculty during coronavirus disease 2019. *Frontiers in Psychology, 12*, 760744. https://doi.org/10.3389/fpsyg.2021.740644

Islami, X. (2021). How to integrate organizational instruments? The mediation of HR practices effect on organizational performance by SCM practices. *Production &*

Manufacturing Research, *9*(1), 206–240. https://doi.org/10.1080/21693277.2021.1978007

Jabatan Pendidikan Tinggi. (2024). *List of private HEI registration and statistics: PHEI Statistics*. [online] Available at: https://jpt.mohe.gov.my/index.php/en/hei/private-hei/25-list-of-private-hei-registration-and-statistic [Accessed on 18 December 2024]

Jabatan Pendidikan Tinggi. (2024). *List of private HEI registration and statistics: Summary Statistics of PHEI By MOHA Approval*. [online] Available at: https://jpt.mohe.gov.my/index.php/en/hei/private-hei/25-list-of-private-hei-registration-and-statistic [Accessed on 18 December 2024]

Jabatan Pendidikan Tinggi. (2024). *Macro Higher Education Institutions*. [online] Available at: https://www.mohe.gov.my/en/downloads/statistics/2023-3/1473-bab-1-makro-2023-pdf/file [Accessed on 18 December 2024]

Jabatan Pendidikan Tinggi. (2024). *Senarai daftar Dan Statistik IPT Swasta*. [online] Available at: https://jpt.mohe.gov.my/portal/index.php/ms/ipt/ipt-swasta/25-senarai-daftar-dan-statistik-ipt-swasta [Accessed on 18 December 2024]

Jha, A. K. (2020). Training and development program and its benefits to employee and organization: A conceptual study. *International Journal of Research in Human Resource Management*, *2*(2), 27-31. https://doi.org/10.33545/26633213.2020.v2.i2a.43

Jiang, X., Liu, H., Fey, C., & Jiang, F. (2018). Entrepreneurial orientation, network resource acquisition, and firm performance: A network approach. *Journal of Business Research*, *87*, 46-57. https://doi.org/10.1016/j.jbusres.2018.02.021

Jocom, J., Lambey, L., & Pandowo, M. (2017). The Effect of Job Rotation and Training on Employee Performance in PT. Pegadaian (Persero) Manado. Journal EMBA: *Journal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi, 5*(2), 279-288. https://doi.org/10.35794/emba.5.2.2017.15554

Johari, J., Shamsudin, F. M., Zainun, N. F., Yean, T. F., & Yahya, K. K. (2022). Institutional leadership competencies and job performance: The moderating role of proactive personality. *International Journal of Educational Management, 36*(6), 1027-1045. https://doi.org/10.1108/ijem-07-2021-0280

Johari, J., & Yahya, K. K. (2016). Job characteristics, work involvement, and job performance of public servants. *European Journal of Training and Development, 40*(7), 554-575. https://doi.org/10.1108/ejtd-07-2015-0051

Judge, T. A., Jackson, C. L., Shaw, J. C., Scott, B. A., & Rich, B. L. (2007). Self-efficacy and work-related performance: The integral role of individual differences. *Journal of Applied Psychology*, *92*(1), 107-127. https://doi.org/10.1037/0021-9010.92.1.107

Kampkotter, P., Harbring, C., & Sliwka, D. (2016). Job rotation and employee performance – evidence from a longitudinal study in the financial services industry. *The International Journal of Human Resource Management*, *29*(10), 1709-1735. https://doi.org/10.1080/09585192.2016.1209227

Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), ***Handbook of industrial and organizational psychology*** (2nd ed., pp. 75–170). Consulting Psychologists Press.

Kang, H. (2021). Sample size determination and power analysis using the G*Power software. *Journal of Educational Evaluation for Health Professions*, *18*, 17. https://doi.org/10.3352/jeehp.2021.18.17

Kappagoda, U. S. (2018). Self-efficacy, task performance and contextual performance: A Sri Lankan experience. *Journal of Human Resource and Sustainability Studies, 06*(02), 157-166. https://doi.org/10.4236/jhrss.2018.62034

Karim, M. M., Choudhury, M. M., & Latif, W. B. (2019). The impact of training and development on employees' performance: an analysis of quantitative data. *Noble International Journal of Business and Management Research, 3*(2), 25-33.

Kasule, G. W., Mugizi, W., & Rwothumio, J. (2021). Satisfaction with human resource management practices and job performance of academic staff in public universities in Uganda: a case of Kyambogo University. *The Uganda Higher Education Review*, *9*(2), 145.

Kavyashree, M. B., Sridevi, K., Nagesh, P., & Nanjundeswaraswamy, T. S. (2022). Relationship between human resource management practices and employee engagement. *Brazilian Journal of Operations & Production Management, 20*(1), 1331. https://doi.org/10.14488/bjopm.1331.2023

Keltu, T. T. (2024). The effect of human resource development practice on employee performance with the mediating role of job satisfaction among Mizan Tepi University's academic staff in southwestern Ethiopia. *Heliyon, 10*(8), e29821. https://doi.org/10.1016/j.heliyon.2024.e29821

Khaiyal, S. F. B., & Ali, D. A. (2022). The Effects of Investments in Human Resource Practices: Challenges and Practices. *Journal of Positive School Psychology, 6*(3), 9192-9200.

Khan, A. J., & Iqbal, J. (2020). Training and employee commitment: The social exchange perspective. *Journal of Management Sciences, 7*(1), 88-100. https://doi.org/10.20547/jms.2014.2007106

Khan, F., Ahmad, J., & Ali, H. (2023). Moderating role of social support on the relationship between job rotation and job performance among academicians in higher education institutions. *CARC Research in Social Sciences, 2*(4), 254-259. https://doi.org/10.58329/criss.v2i4.87

Khuong, M. N., Mai, T. P., & Phuong, N. T. (2020). The impacts of human resource management practices on employees' motivation and loyalty. *Management Science Letters, 10*(11), 2673-2682. https://doi.org/10.5267/j.msl.2020.3.025

Kilroy, J., Dundon, T., & Townsend, K. (2022). Embedding reciprocity in human resource management: A social exchange theory of the role of frontline managers. *Human Resource Management Journal, 33*(2), 511-531. https://doi.org/10.1111/1748-8583.12468

Kim, H. (2013). Statistical notes for clinical researchers: Assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics, 38*(1), 52. https://doi.org/10.5395/rde.2013.38.1.52

Kim, H., & Qu, H. (2020). Effects of employees' social exchange and the mediating role of customer orientation in the restaurant industry. *International Journal of Hospitality Management, 89*, 102577. https://doi.org/10.1016/j.ijhm.2020.102577

Kleine, A., Schmitt, A., & Wisse, B. (2021). Students' career exploration: A meta-analysis. *Journal of Vocational Behavior, 131*, 103645. https://doi.org/10.1016/j.jvb.2021.103645

Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). Guilford Publications.

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., De Vet Henrica, C., & Van der Beek, A. J. (2011). Conceptual frameworks of individual work

performance. *Journal of Occupational & Environmental Medicine, 53*(8), 856-866. https://doi.org/10.1097/jom.0b013e318226a763

Koopmans, L., Bernaards, C., Hildebrandt, V., van Buuren, S., van der Beek, A. J., & de Vet, H. C. (2013). Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management, 62*(1), 6-28. https://doi.org/10.1108/17410401311285273

Kostadinova-Maslarova, M. (2019). Career planning. *Science, Engineering and Education, 4*(1), 81-86. https://doi.org/10.59957/see.v4.i1.2019.12

Kremmydas, E., & Austen, A. (2020). High-performance human resource practices through the lenses of the ability–motivation–Opportunity taxonomy: A multilevel perspective. *International Journal of Contemporary Management, 19*(3), 23-42. https://doi.org/10.4467/24498939ijcm.20.009.13151

Krijgsheld, M., Tummers, L. G., & Scheepers, F. E. (2022). Job performance in healthcare: A systematic review. *BMC Health Services Research, 22*(1), 149. https://doi.org/10.1186/s12913-021-07357-5

Kumar, M., Talib, S.A. & Ramayah, T. (2013). *Business research methods*. Oxford Fajar/Oxford University Press.

Kumar Pradhan, R., Prasad Panigrahy, N., & Kesari Jena, L. (2020). Self-efficacy and workplace well-being: Understanding the role of resilience in manufacturing organizations. *Business Perspectives and Research, 9*(1), 62-76. https://doi.org/10.1177/2278533720923484

Kundu, S. C., Kumar, S., & Lata, K. (2019). Effects of perceived role clarity on innovative work behavior: A multiple mediation model. *RAUSP Management Journal, 55*(4), 457-472. https://doi.org/10.1108/rausp-04-2019-0056

Kusuma Hidayati, R., Musrihah, & Rosyafah, S. (2024). The Influence of Workload, Job Rotation, Self-Efficacy on Employee Performance with Job Satisfaction as a Mediation Variable in Surabaya City Land Office Employees. *Proceeding of International Conference on Business and Banking Innovations*, *6*, 160–165. Retrieved from https://conference.perbanas.ac.id/index.php/ICOBBI/article/view/146

Lai, T. D. (2023). *Malaysian employees less engaged at work, open to AI assistance*. [online] Available at: https://hrnews.my/2023/11/08/malaysian-employees-less-engaged-at-work-open-to-ai-assistance/ [Accessed on 18 December 2024]

Lam, W., Chen, Z., & Takeuchi, N. (2009). Perceived human resource management practices and intention to leave of employees: the mediating role of organizational citizenship behaviour in a Sino-Japanese joint venture. *The International Journal of Human Resource Management, 20*(11), 2250-2270. https://doi.org/ 10.1080/09585190903239641

Le Sante, D. R., Eaton, A. A., & Viswesvaran, C. (2021). How contextual performance influences perceptions of personality and leadership potential. *Journal of Work and Organizational Psychology, 37*(2), 93-106. https://doi.org/10.5093/jwop2021a10

Lee, H., Kim, J. M., & Han, J. W. (2017). Impact of job rotation stress in nurses on psychological well-being: Focusing on the mediating effect of challenge assessment and hindrance assessment. *Journal of the Korea Academia-Industrial Cooperation Society, 18*(10), 373-381. https://doi.org/10.5762/KAIS.2017.18.10.373

Lee, S. H., & Jeong, D. Y. (2017). Job insecurity and turnover intention: Organizational commitment as mediator. *Social Behavior and Personality, 45*(4), 529–536. https://doi.org/10.2224/sbp.5865

Litynska, V. (2023). Career Planning for Employees of Higher Education Institutions. *Educational Analytics of Ukraine*. https://doi.org/10.32987/2617-8532-2023-1-67-78.

Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., & Reber, S. (2017). Descriptive Analysis in Education: A Guide for Researchers. NCEE 2017-4023. *National Center for Education Evaluation and Regional Assistance*.

Lyons, P., & Bandura, R. (2022). Coaching to enhance learning and engagement and reduce turnover. *Journal of Workplace Learning, 34*(1), 27–40. https://doi.org/10.1108/JWL-04-2021-0037

Mahmood, S. (2021). The effect of human resource management practices on employee performance. *Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12*(3), 2900-2911. https://doi.org/10.17762/turcomat.v12i3.1321

Mahmud, M. I., Noah, S. M., Wan Jaafar, W. M., Abu Bakar, A. Y., & Amat, S. (2019). The Career Readiness Construct between Dysfunctional Career Thinking and Career SelfEfficacy Among Undergraduate Students. *Journal of Engineering Science and Technology, 3*, 74 - 81. https://jestec.taylors.edu.my/Special%20issue%20on%20ICEES2018/ICEES2018_10.

Maksimović, J., & Evtimov, J. (2023). Positivism and post-positivism as the basis of quantitative research in pedagogy. *Research in Pedagogy, 13*(1), 208-218. https://doi.org/10.5937/istrped2301208m

Marin-Garcia, J. A., & Tomas, M. J. (2016). Deconstructing AMO framework: A systematic review. *Intangible Capital, 12*(4), 1040. https://doi.org/10.3926/ic.838

Marinova, S. V., Cao, X., & Park, H. (2018). Constructive organizational values climate and organizational citizenship behaviors: A configurational view. *Journal of Management*, *45*(5), 2045-2071. https://doi.org/10.1177/0149206318755301

Maripaz, A., Ombra, I., & Shuki, O. (2013). Employability Skills and Task Performance of Employees in Government Sector. *International Journal of Humanities and Social Science*, *3*(4), 150-162. https://www.ijhssnet.com/journals/Vol_3_No_4_Special_Issue_February_2013/16.pdf

Martini, S., Khan, W. A., & Muttaqiyathun, A. (2023). The influence of training, motivation, and self-efficacy on career planning. *Jurnal Genesis Indonesia*, *2*(02), 54-73. https://doi.org/10.56741/jgi.v2i02.153

Mata, Á. N., De Azevedo, K. P., Braga, L. P., De Medeiros, G. C., De Oliveira Segundo, V. H., Bezerra, I. N., Pimenta, I. D., Nicolás, I. M., & Piuvezam, G. (2021). Training in communication skills for self-efficacy of health professionals: A systematic review. *Human Resources for Health*, *19*(1), 30. https://doi.org/10.1186/s12960-021-00574-3

Matagi, L., Baguma, P., & Baluku, M. M. (2022). Age, job involvement and job satisfaction as predictors of job performance among local government employees in Uganda. *Journal of Organizational Effectiveness: People and Performance*, *9*(3), 489-505. https://doi.org/10.1108/joepp-06-2020-0099

Mazzetti, G., & Schaufeli, W. B. (2022). The impact of engaging leadership on employee engagement and team effectiveness: A longitudinal, multi-level study on the mediating role of personal- and team resources. *PLoS One*, *17*(6), e0269433. https://doi.org/10.1371/journal.pone.0269433

McNeish, D. (2018). Thanks coefficient Alpha, we'll take it from here. *Psychological Methods, 23*(3), 412-433. https://doi.org/10.1037/met0000144

Meijerink, J. G., Beijer, S. E., & Bos-Nehles, A. C. (2020). A meta-analysis of mediating mechanisms between employee reports of human resource management and employee performance: different pathways for descriptive and evaluative reports? *The International Journal of Human Resource Management, 32*(2), 394–442. https://doi.org/10.1080/09585192.2020.1810737

Meira, J. V., & Hancer, M. (2021). Using the social exchange theory to explore the employee-organization relationship in the hospitality industry. *International Journal of Contemporary Hospitality Management, 33*(2), 670-692. https://doi.org/10.1108/ijchm-06-2020-0538

Memon, M. A., Ting, H., Ramayah, T., Chuah, F., & Cheah, J. (2017). A review of the methodological misconceptions and guidelines related to the application of structural equation modeling: A Malaysian scenario. *Journal of Applied Structural Equation Modeling, 1*(1), i-xiii. https://doi.org/10.47263/jasem.1(1)01

Ministry of Higher Education. (2024). *Private Higher Education Institutions 2023*. [online] Available at: https://www.mohe.gov.my/en/downloads/statistics/2023-3/1475-bab-3-ipts-2023-pdf/file [Accessed on 18 December 2024)

Mirda, R., & Prasetyo, P. (2022). Job characteristics, job involvement, and transformational leadership's effects on employee performance through work engagement. *Indonesian Journal of Multidisciplinary Science, 2*(3), 2129-2140. https://doi.org/10.55324/ijoms.v2i3.341

Mirzaei-Alavijeh, M., Hosseini, S. N., Ashtarian, H., Karami-Matin, B., Ahmadi Jouibari, T., Ghartappeh, A., Pirouzeh, R., & Jalilian, F. (2020). Job involvement among

faculty members of Kermanshah University of medical sciences and its relationships with professional variables. *International Journal of Health and Life Sciences, 6*(1), e99557. https://doi.org/10.5812/ijhls.99557

Mlekus, L., & Maier, G. W. (2021). More hype than substance? A meta-analysis on job and task rotation. *Frontiers in Psychology, 12*. https://doi.org/10.3389/fpsyg.2021.633530

Moana-Filho, E. J., Alonso, A. A., Kapos, F. P., Leon-Salazar, V., Durand, S. H., Hodges, J. S., & Nixdorf, D. R. (2017). Multifactorial assessment of measurement errors affecting intraoral quantitative sensory testing reliability. *Scandinavian Journal of Pain*, *16*(1), 93-98. https://doi.org/10.1016/j.sjpain.2017.03.007

Moè, A., Pazzaglia, F., & Ronconi, L. (2010). When being able is not enough. The combined value of positive affect and self-efficacy for job satisfaction in teaching. *Teaching and Teacher Education, 26*(5), 1145-1153. https://doi.org/10.1016/j.tate.2010.02.010

Mohanraj, D., & Panchanatham, D. N. (2017). Effect of Training and Development Programmes on Self-Efficacy of Banking Professionals in Chennai City. *International Journal of Management, 8*(5), 31-43. https://iaeme.com/MasterAdmin/Journal_uploads/IJM/VOLUME_8_ISSUE_5/IJM_08_05_004.pdf

Mohd Hazwan, M. P., Aslina, M., & Abdullah, M. R. (2023). Career-related characteristics towards career certainty of vocational college students. *Journal of Technical Education and Training*, *15*(3), 92-104. https://doi.org/10.30880/jtet.2023.15.03.009

Monteiro, R., Monteiro, D., Torregrossa, M., & Travassos, B. (2021). Career planning in elite soccer: The mediating role of self-efficacy, career goals, and athletic identity. *Frontiers in Psychology, 12*. https://doi.org/10.3389/fpsyg.2021.694868

Moore, J. (2010). Philosophy of science, with special consideration given to behaviorism as the philosophy of the science of behavior. *The Psychological Record, 60*(1), 137-150. https://doi.org/10.1007/bf03395698

Motowidlo, S. J. (2003). Job performance. In W. C. Borman, D. R. Ilgen, R. J. Klimoski, & Weiner, I. B. (Eds.) *Handbook of psychology, 12*, 39-53

Musafir, M. (2022). Relationship between employee satisfaction and perceived organization support on Individul performance: Job involvement as a mediating variable at sharia commercial bank in Makassar City. *Devotion: Journal of Research and Community Service, 3*(9), 829-842. https://doi.org/10.36418/dev.v3i9.189

Musawir, M., Wardi, Y., & Rasyid, R. (2019). The effect of job rotation, compensation and organizational citizenship behaviour on employees' performance of PT Pegadaian (Persero). *Proceedings of the 2nd Padang International Conference on Education, Economics, Business and Accounting (PICEEBA-2 2018),* 1025-1037. https://doi.org/10.2991/piceeba2-18.2019.96

Na-Nan, K., Saribut, S., & Sanamthong, E. (2019). Mediating effects of perceived environment support and knowledge sharing between self-efficacy and job performance of SME employees. *Industrial and Commercial Training, 51*(6), 342-359. https://doi.org/10.1108/ict-01-2019-0009

Nava-Macali, J., Nava-de Jesus, C., & Almari, E. P. (2019). Effectiveness of Career Development Program on Job Satisfaction and Retention of Employees in a Private

University in the Philippines. *Archives of Business Research, 7*(7), 301–310. https://doi.org/10.14738/abr.77.6730

Neuert, C. E., & Lenzner, T. (2015). Incorporating eye tracking into cognitive interviewing to pretest survey questions. *International Journal of Social Research Methodology, 19*(5), 501–519. https://doi.org/10.1080/13645579.2015.1049448

Neuman, W.L. (2011). *Social Research Methods: Qualitative and Quantitative Approaches. 7th Edition*, Pearson, Boston.

Niati, D. R., Siregar, Z. M., & Prayoga, Y. (2021). The effect of training on work performance and career development: The role of motivation as intervening variable. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 4*(2), 2385-2393. https://doi.org/10.33258/birci.v4i2.1940

Nik Mat, N. H., Mohamed, W. N., Salleh, H. S., & Yusof, Y. (2021). HR and employee significant behavior: Explaining the black box through AMO theory. *Pertanika Journal of Social Sciences and Humanities, 29*(4), 2569-2589. https://doi.org/10.47836/pjssh.29.4.26

Ng Corrales, L. D., Lambán, M. P., Morella, P., Royo, J., Sánchez Catalán, J. C., & Hernandez Korner, M. E. (2022). Developing and implementing a lean performance indicator: Overall process effectiveness to measure the effectiveness in an operation process. Machines, 10(2), 133. https://doi.org/10.3390/machines10020133

Noe, R., Hollenbeck, J., Gerhart, B., & Wright, P. (2019). *Fundamentals of human resource management (8th ed.)*. New York: McGraw-Hill.

Norzanah, M. N., Elaina, R. J., & Siti Murni, M. K. (2021). The study on human resource practices and AMO model and its impact on employee commitment among Gen Y

SMEs employees in Selangor, Malaysia. *International Journal of Business and Society, 22*(3), 1602-1622. https://doi.org/10.33736/ijbs.4324.2021

Nurhayati, M., Asih, D., Kasmo, A., & Santosa, A. (2024). Effect of career development support on work engagement using workplace social capital and organizational commitment as moderation and mediation. *Jurnal Riset Bisnis dan Manajemen, 17*(1), 111-120. https://doi.org/10.23969/jrbm.v17i1.10718

Nurin Farzana, M. F., Puteri Nur Syarah, N. S., Aina Farhana, M. N., Nurul Zafirah, M. P., & Fadilah, P. (2022). Towards a High Standards of Excellence in Malaysia's Higher Education Institutions: Obstacles and Enablers. *Journal of Administrative Science, 19*(2), 162-192. https://jas.uitm.edu.my/images/2022_DEC/9.pdf

Nursyazwani, J. (2023). *Survey: Malaysian employees less engaged at work*. [online] Available at: https://www.nst.com.my/business/corporate/2023/11/976470/survey-malaysian-employees-less-engaged-work [Accessed on 18 December 2024]

Nusraningrum, D., Rahmawati, A., Wider, W., Jiang, L., & Udang, L. N. (2024). Enhancing employee performance through motivation: The mediating roles of green work environments and engagement in Jakarta's logistics sector. *Frontiers in Sociology, 9,* 1392229. https://doi.org/10.3389/fsoc.2024.1392229

Nyaisu, A., Muya, J., & Ngacho, C. (2017). The influence of employee training implementation on job performance: A case of the non-teaching staff of the University of Kabianga, Kenya. *International Journal of Social Science and Information Technology, 3*(5), 2138–2146.

Nyaupane, G. P., Prayag, G., Godwyll, J., & White, D. (2020). Toward a resilient organization: analysis of employee skills and organization adaptive traits. *Journal of*

Sustainable Tourism, 29(4), 658–677. https://doi.org/10.1080/09669582.2020.1822368

Obasi, F. U., & Wokoma, I. S. (2018). Training and Development for Employees' Optimal Job Performance in Institutions of Higher Education. *International Journal of Scientific Research in Education, 16*(2), 119-136.

Ogbonnaya, C., & Valizade, D. (2016). High performance work practices, employee outcomes and organizational performance: a 2-1-2 multilevel mediation analysis. *The International Journal of Human Resource Management, 29*(2), 239–259. https://doi.org/10.1080/09585192.2016.1146320

Okolie, U. C., Igwe, P. A., Nwajiuba, C. A., Mlanga, S., Binuomote, M. O., Nwosu, H. E., & Ogbaekirigwe, C. O. (2020). Does PhD qualification improve pedagogical competence? A study on teaching and training in higher education. *Journal of Applied Research in Higher Education, 12*(5), 1233-1250. https://doi.org/10.1108/jarhe-02-2019-0049

Ooi, L., Ng, K. L., Heng, W. C., Chua, Y. F., & Lim, Y. H. (2022). Human Resource Practices and Employee Engagement: A Study Among Academicians in Malaysian Private Higher Education Institutions. *International Journal of Management Studies, 29*(2), 71–100. https://doi.org/10.32890/ijms2022.29.2.4

Osman, Z. (2020). Indirect relationship among leadership styles, self-efficacy and academic employees' performance in Malaysian online distance learning higher education institutions. *International Journal of Academic Research in Business and Social Sciences, 10*(8), 142-158. https://doi.org/10.6007/ijarbss/v10-i8/7717

Otoo, F. N. (2024). The mediating role of employee performance in the relationship between human resource management (HR) practices and police service effectiveness. *IIM*

Ranchi Journal of Management Studies, *3*(2), 108-141. https://doi.org/10.1108/irjms-08-2023-0070

Paauwe, J., & Boselie, P. (2005). HR and performance: What next? *Human Resource Management Journal*, *15*(4), 68-83. https://doi.org/10.1111/j.1748-8583.2005.tb00296.x

Pallant, J. (2011). *SPSS survival manual: A step by step guide to data analysis using the SPSS program* (4th ed.), Allen & Unwin, Berkshire.

Park, S., & Park, S. (2019). Employee adaptive performance and its antecedents: Review and synthesis. *Human Resource Development Review*, *18*(3), 294-324. https://doi.org/10.1177/1534484319836315

Parker, S. K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, *83*(6), 835-852. https://doi.org/10.1037//0021-9010.83.6.835

Patnaik, S. (2020). Operationalizing Employee Performance: A Literature Review. *Training and development journal*, *11*, 45-56. https://doi.org/10.5958/2231-069X.2020.00006.2.

Pattnaik, S., & Pattnaik, S. (2020). Exploring employee performance dimensionality in Indian public sector units. *International Journal of Productivity and Performance Management*, *70*(3), 657-674. https://doi.org/10.1108/ijppm-08-2019-0374

Pazetto, C. F., Luiz, T. T., & Beuren, I. M. (2023). Empowering leadership for contextual performance: Serial mediation of organizational support and commitment. *International Journal of Productivity and Performance Management*, *73*(4), 1005-1026. https://doi.org/10.1108/ijppm-04-2022-0195

Pearl Dlamini, N., Suknunan, S., & Bhana, A. (2022). Influence of employee-manager relationship on employee performance and productivity. *Problems and Perspectives in Management, 20*(3), 28-42. https://doi.org/10.21511/ppm.20(3).2022.03

Philippaers, K., De Cuyper, N., & Forrier, A. (2017). Employable, committed, and thus well-performing: A matter of interdependent forward-looking social exchange. *European Journal of Work and Organizational Psychology, 26*(5), 755–767. https://doi.org/10.1080/1359432X.2017.1351950

Podsakoff, P. M., Mackenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology, 88*(5), 879– 903. https://doi.org/10.1037/0021-9010.88.5.879

Pradhan, G. M., & Shrestha, P. (2021). Impact of Training & Development and Career Planning on Employee Involvement. *Journal of Balkumari College, 10*(1), 13-18. https://doi.org/10.3126/jbkc.v10i1.42086

Prasetyo, P., Kusmaningtyas, A., & Nugroho, R. (2021). Effect of job involvement on employee performance through work engagement at bank Jatim. *Universal Journal of Management, 9*(2), 29-37. https://doi.org/10.13189/ujm.2021.090201

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*(4), 717-731. https://doi.org/10.3758/bf03206553

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879-891. https://doi.org/10.3758/brm.40.3.879

Presser, S., Rothgeb, J. M., Couper, M. P., Lessler, J. T., Martin, E., Martin, J., & Singer, E. (2004). *Methods for testing and evaluating survey questionnaires*. John Wiley & Sons.

Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology, 85*(4), 612-624. https://doi.org/10.1037//0021-9010.85.4.612

Raiya Umar, T., Abdulkadir Yammama, B., & Otse Shaibu, R. (2020). The implications of adopting and implementing electronic human resource management practices on job performance. *Journal of Human Resource Management, 8*(2), 96. https://doi.org/10.11648/j.jHR.201200802.17

Ramayah, T., Jacky, C., Chuah, F., Ting, H., & Memon, M. A. (2018). *Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0. Handbook of Market Research* (2th Editio). Pearson Malaysia Sdn Bhd.

https://doi.org/10.1007/978-3-319-05542-8_15-1

Rana, S. K. (2022). Empirical data study from higher education sector about improving productivity of employees via job involvement. *Amity Journal of Professional Practices, 2*(01). https://doi.org/10.55054/ajpp.v2i01.632

Rasool, S. F., Samma, M., Wang, M., Zhao, Y., & Zhang, Y. (2019). How Human Resource Management Practices Translate Into Sustainable Organizational Performance: The Mediating Role Of Product, Process And Knowledge Innovation. *Psychology Research and Behavior Management, 12*, 1009–1025. https://doi.org/10.2147/PRBM.S204662

Ravikumar, B., Kokila, M., & Seetha, R. V. (2020). The influence of job rotation practices on employee performance, mediation effect of human factor and motivation.

International Journal of Management and Humanities, 4(6), 24-29. https://doi.org/10.35940/ijmh.f0579.024620

Razali, N. M., & Wah, Y. B. (2011). Power comparisons of shapiro-wilk, Kolmogorov smirnov, lilliefors and anderson-darling tests. *Journal of statistical modelling and analytics, 2*(1), 21-33.

Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives: Examining post HOC statistical techniques for detection and correction of common method variance. *Organizational Research Methods, 12*(4), 762–800. https://doi.org/10.1177/1094428109332834

Rizanuddin, H. (2020). Influences of career planning, leadership and organizational culture towards employee work effectiveness. Budapest International Research and Critics Institute (BIRCI-Journal): *Humanities and Social Sciences, 3*(3), 1791-1799. https://doi.org/10.33258/birci.v3i3.1112

Rodrigues, N., & Rebelo, T. (2009). Work sample tests: Their relationship with job performance and job experience. *Revista de Psicología del Trabajo y de las Organizaciones, 25*(1), 47-58. https://doi.org/10.4321/s1576-59622009000100006

Roe, R. A. (1999). Work performance: A multiple regulation perspective. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 14, pp. 231–335). Chichester: Wiley.

Rossiandy, Y., & Indradewa, R. (2023). The influence of self-efficacy on job satisfaction, organizational commitment, motivation and job performance in private school teachers. *Asian Journal of Social and Humanities, 1*(10), 632-649. https://doi.org/10.59888/ajosh.v1i10.74

Roswandi, D. A., Rosyidi, U., Sujanto, B., & Paramaartha, D. N. (2021). Examining the Effect of Self-Efficacy and Job Involvement on the Job Satisfaction of the Family Planning Field Workers at the National Population and Family Planning. *Academy of Entrepreneurship Journal, 27*(55), 1-9.

Rotenberry, P. F., & Moberg, P. J. (2007). Assessing the impact of job involvement on performance. *Management Research News, 30*(3), 203-215. https://doi.org/10.1108/01409170710733278

Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology, 87*(1), 66–80. https://doi.org/10.1037/0021-9010.87.1.66

Runhaar, P. (2016). How can schools and teachers benefit from human resources management? Conceptualising HR from content and process perspectives. *Educational Management Administration & Leadership, 45*(4), 639-656. https://doi.org/10.1177/1741143215623786

Saad, A. S., Ali, D. A., Hashim, S. R., Maram, M. A., & Muthusamy, R. G. (2022). Role Of Self-Efficacy in The Relationship of Training and Employee Performance. *Journal of Positive School Psychology, 6*(10), 3347-3352.

Salih, M. O., & Al.Ibed, A. A. (2017). Job rotation & Its impact on employees' performance: An empirical study among employees at Red Sea University, Sudan. *International Journal of Scientific Research and Management, 5*(7), 6181-6184. https://doi.org/10.18535/ijsrm/v5i7.46

Salman, M., Khan, M. N., Draz, U., Iqbal, M. J., & Aslam, K. (2016). Impact of self-efficacy on employee's job performance in health sector of Pakistan. *American Journal of Bossiness and Society, 1*(3), 136–142

Salman, M., Saleem, I., & Ganie, S. A. (2022). Human resource management practices as antecedents of employee competencies: Empirical evidence from the banking industry. *Management and Labour Studies, 48*(3), 381-398. https://doi.org/10.1177/0258042x221138362

Samuel, S. F., Muhammad, S. M., & Johnson, O. (2021). Influence of Job Involvement on Dimensions of Job Performance among Marketers in Nigerian Banks. *KIU Journal of Social Sciences, 7*(4), 145–158.

Sante, D. R. L., Eaton, A. A., and Viswesvaran, C. (2021). How Contextual Performance Influences Perceptions of Personality and Leadership Potential. *Journal of Work and Organizational Psychology, 37*(2), 93 - 106. https://doi.org/10.5093/jwop2021a10

Saputra, G. W., Kurniawati, K., Johan, A., & Sulistyan, R. B. (2023). Analysis of Employee Performance Improvement: The Role of Social Exchange Theory. *Wiga: Jurnal Penelitian Ilmu Ekonomi, 13*(2), 272–281.

Sarah, M., Hasnida, & Lita, H. W. (2018). Career Planning Training to Improve Career Decision Making Self Efficacy and Achievement Motivation in High School Students. *International Research Journal of Advanced Engineering and Science, 3*(3), 119-123. https://irjaes.com/wp-content/uploads/2020/10/IRJAES-V3N3P237Y18.pdf

Saul, T. F., Binza, M. S., & Moeti, K. (2023). An alignment of personal development plans with training and development of employees at SASSA. *SA Journal of Human Resource Management, 21,* a2161. https://doi.org/10.4102/sajHR.v21i0.2161

Saunders, M., Lewis, P. & Thornhill, A. (2012). *Research Methods for Business Students*. 6th edition, Pearson Education Limited.

Saunders, M. N., Thornhill, A., & Lewis, P. (2023). *Research methods for business students*. Harlow: Pearson Education.

Schiemann, W. A. (2009). Aligning performance management with organizational strategy, values, and goals. In Smither, A. W. and London, M. (Eds.), *Performance Management: Putting Research into action* (Pp. 45-88). Wiley, San Francisco, CA.

Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie, 69*(S2), 107-131. https://doi.org/10.1007/s11577-017-0454-1

Sekaran, U. & Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach*. John Wiley & Sons.

Septiadi, S. A., Sintaasih, D. K., & Wibawa, I. M. (2017). Pengaruh keterlibatan kerja terhadap kinerja dengan pemediasi komitmen organisasional. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, 3103. https://doi.org/10.24843/eeb.2017.v06.i08.p07

Setyawati, N. W., Woelandari, D. S., & Rianto, M. R. (2022). Career development, motivation and promotion on employee performance. *East Asian Journal of Multidisciplinary Research, 1*(9), 1957-1970. https://doi.org/10.55927/eajmr.v1i9.1453

ShahidMahmood, Shahrizal, B. & Kamal, A. H. (2022). The Effect of HR Practices and Self-Efficacy on Employee's Performance. *Journal of Global Business and Social Entrepreneurship (GBSE), 7*(23), 126-138. http://gbse.my/V8%20NO.23%20(JANUARY%202022)/Paper-293-.pdf

Sharen, K. (2024). *1 in 2 Malaysians will quit their jobs if there's no career growth*. [online] Available at: https://www.nst.com.my/business/economy/2024/04/1038362/1-2-malaysians-will-quit-their-jobs-if-theres-no-career-growth [Accessed on 18 December 2024]

Shastri, S. (2023). Employee Awareness Towards Career Planning and Preparedness to Combat Career Challenges. *International Journal of Humanities and Social Sciences Review (IJHSSR) ISSN 2582-9106, 3*(1), 48-60.

Sholikhah, M., Hadiyati, E., & Halim, A. (2023). Job satisfaction as a mediator of abilities and rotation on performance in educational personnel faculty of law, Brawijaya University, Malang. *International Journal of Environmental, Sustainability, and Social Science, 4*(5), 1359-1368. https://doi.org/10.38142/ijesss.v4i5.788

Shoss, M. K., Witt, L. A., & Vera, D. (2012). When does adaptive performance lead to higher task performance? *Journal of Organizational Behavior, 33*(7), 910-924. https://doi.org/10.1002/job.780

Sifawa, M. A., & Mukasa, S. (2024). Impact of Continuous Professional Development on Academic Staff Performance in Sokoto State University, Sokoto, Nigeria. *Journal of Innovative Technologies and Business for Sustainable Development, 5,* 162-174. https://www.theinterscholar.org/journals/index.php/asabareview/article/view/274/154

Sijtsma, K. (2008). On the use, the misuse, and the very limited usefulness of Cronbach's Alpha. *Psychometrika, 74*(1), 107-120. https://doi.org/10.1007/s11336-008-9101-0

Sikul, R., Harun, A., Mohtar, T. M., & Datu Eranza, D. R. (2015). Factors Influencing Job Performance: A Case Study Amongst Teaching Staff in Kota Kinabalu

Polytechnic. *Malaysian Journal of Business and Economics (MJBE), 2*(2), 41-58. https://doi.org/10.51200/mjbe.v2i2.598

Siyal, S., Xin, C., Peng, X., Siyal, A. W., & Ahmed, W. (2020). Why do high-performance human resource practices matter for employee outcomes in public sector universities? The mediating role of person–organization fit mechanism. *SAGE Open, 10*(3), 215824402094742. https://doi.org/10.1177/2158244020947424

Snape, E., & Redman, T. (2010). HR practices, organizational citizenship behaviour, and performance: A multi-level analysis. *Journal of Management Studies, 47*(7), 1219-1247. https://doi.org/10.1111/j.1467-6486.2010.00911.x

Soebandono, A. C., & Nilawati, L. (2016). The effect analysis of mediation variable of task productivity on the self-efficacy and employees' performance. *Journal of Economics, Business & Accountancy Ventura, 19*(2), 237. https://doi.org/10.14414/jebav.v19i2.587

Somuah, C. O., Mensah, H. K., & Gyimah, P. (2024). Training practices and job performance in public universities: leveraging on self-efficacy and organizational politics. *Cogent Business & Management, 11*(1), 2328309. https://doi.org/10.1080/23311975.2024.2328309

Song, Z., Wanberg, C., Niu, X., & Xie, Y. (2006). Action–state orientation and the theory of planned behavior: A study of job search in China. *Journal of Vocational Behavior, 68*(3), 490-503. https://doi.org/10.1016/j.jvb.2005.11.001

Sonnentag, S., & Frese, M. (2002). Performance concepts and performance theory. Psychological Management of Individual Performance, 1-25. https://doi.org/10.1002/0470013419.ch1

Srivastava, S., & Pathak, P. (2019). Employees' Job Performance through the Lens of Self-Efficacy and Job Involvement. International Journal of Research and Analytical Reviews, *6*(2), 45-60. https://www.researchgate.net/publication/342673708_Employees'_Job_Performance_through_the_Lens_of_Self-Efficacy_and_Job_Involvement

Subiyanto, D., Khusniah, & Septyarini, E. (2022). Analysis of the effect of employee engagement, perceived organizational support, and motivation on employee performance study at PT. Dino Jaya Karya. *Reslaj: Religion Education Social Laa Roiba Journal*, *4*(3), 447-460. https://doi.org/10.47467/reslaj.v4i3.789

Suleman, A., Bingab, B. B., Boakye, K. O., & Sam-Mensah, R. (2022). Job rotation practices and employees performance: Do job satisfaction and organizational commitment matter? *SEISENSE Business Review*, *2*(1), 13-27. https://doi.org/10.33215/sbr.v2i1.730

Suparjo, S., & Nurchayati, N. (2022). Career development and employee performance in private University : A study of UNTAG Semarang, Central Java, Indonesia. *Proceeding of The International Conference on Business and Economics*, *1*(1), 99-112. https://doi.org/10.56444/icbeuntagsmg.v1i1.289

Suparna, D., & Noor, J. (2021). The mediating role of commitment organizational dimensions between job involvement on employee performance: A cross-sectional study. *Asia Pacific Management and Business Application*, *9*(03), 297-312. https://doi.org/10.21776/ub.apmba.2021.009.03.8

Sušanj, Z., Jakopec, A., & Đorić, A. (2020). Academics' effectiveness and professional development in Croatia: Challenges for human resource management in higher

education institutions. *European Journal of Education, 55*(4), 476-488. https://doi.org/10.1111/ejed.12422

Sypniewska, B., Baran, M., & Kłos, M. (2023). Work engagement and employee satisfaction in the practice of sustainable human resource management – based on the study of Polish employees. *International Entrepreneurship and Management Journal, 19*(3), 1069-1100. https://doi.org/10.1007/s11365-023-00834-9

Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics* (6th ed.). Boston, MA: Pearson.

Tabiu, A., Pangil, F., & Othman, S. Z. (2016). Examining the link between HR practices and employees' performance in Nigerian public sector. *Management Science Letters*, 395-408. https://doi.org/10.5267/j.msl.2016.4.006

Taherdoost, H. (2016). Validity and reliability of the research instrument; How to test the validation of a questionnaire/Survey in a research. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3205040

Tang, G., Yu, B., Cooke, F.L. & Chen, Y. (2017). High-performance work system and employee creativity. *Personnel Review, 46*(7), 1318–1334. doi: 10.1108/pr-09-2016-0235.

Tariq, M. H., & Diana, P. D. (2022). The Role of Self-efficacy on Job Involvement of Academicians in Higher Education Institutions. *Journal of Positive School Psychology, 6*(4), 4991-4999.

Tashliyev, A., & Tirtoprojo, S. (2023). Examining the factors affecting employee performance of higher education institution employee in the new normal era. *International Journal of Economics and Business Issues, 2*(1), 47-57. https://doi.org/10.59092/ijebi.vol2.iss1.26

Tehseen, S., Ramayah, T., & Sajilan, S. (2017). Testing and Controlling for Common Method Variance: A Review of Available Methods. *Journal of Management Sciences, 4*(2), 142–168. https://doi.org/10.20547/jms.2014.1704202

Tengah, A. (2022). The Relationship between HR Practices and Academic Staff Job Engagement: The Role of Leader-Member Exchange as Moderator: Hubungan antara Amalan Pengurusan Sumber Manusia dengan Penglibatan Kerja Staf Akademik: Peranan Pertukaran Ketua-Ahli sebagai Moderator. *Journal of Management and Muamalah, 12*(1), 74-93.

Tensay, A. T., & Singh, M. (2020). The nexus between HR, employee engagement and organizational performance of federal public service organizations in Ethiopia. *Heliyon, 6*(6), e04094. https://doi.org/10.1016/j.heliyon.2020.e04094

Thevanes, N., & Dirojan, T. (2018). Impact of Training and Job Involvement on Job Performance. *International Journal of Scientific and Management Research*, 1(1), 1-10.

Thongpapanl, N., Kaciak, E., & Welsh, D. H. (2018). Growing and aging of entrepreneurial firms. *International Journal of Entrepreneurial Behavior & Research, 24*(6), 1087-1103. https://doi.org/10.1108/ijebr-03-2018-0135

Tichat, S. (2022). Impact Of Job Rotation on Employees Performance Case Study: The National Savings and Reserve Fund-Bank-Reghaia. *El - Acil Journal for Economic and Administrative Research, 6*(2), 15-32.

Trang, P. T. (2023). Training and continuous improvement: The moderation effect of transfer climate and the mediation influence of self-efficacy. *The TQM Journal, 36*(4), 1212-1234. https://doi.org/10.1108/tqm-02-2023-0066

Truitt, D. L. (2011). The Effect of Training and Development on Employee Attitude as it Relates to Training and Work Proficiency. *Sage Open, 1*(3), 1-13. https://doi.org/10.1177/2158244011433338

Tsen, M. K., Gu, M., Tan, C. M., & Goh, S. K. (2022). Does flexible work arrangements decrease or increase turnover intention? A comparison between the social exchange theory and border theory. *International Journal of Sociology and Social Policy, 42*(11–12), 962–983. https://doi.org/10.1108/IJSSP-08-2021-0196

Uddin, M. A., Mahmood, M., & Fan, L. (2019). Why individual employee engagement matters for team performance? Mediating effects of employee commitment and organizational citizenship behavior. *Team Performance Management, 25*(1/2), 47–68. https://doi.org/10.1108/TPM-12-2017-0078

Ujma, M., & Ingram, T. (2019). Perception of ability-motivation-opportunity oriented HR practices and organizational commitment: The role of task uncertainty. *Journal of Entrepreneurship, Management and Innovation, 15*(4), 139-162. https://doi.org/10.7341/20191545

Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using Partial Least Squares. *Journal of Information Technology Theory and Application (JITTA), 11*(2), 5–40.

Using items from several questionnaires (more than 3 authors) in research instrument consider adaption or developing instrument? (n.d.). *ResearchGate*. https://www.researchgate.net/post/Using_items_from_several_questionnaires_more_than_3_authors_in_research_instrument_consider_adaption_or_developing_instrument

Van Assen, M. F. (2020). Training, employee involvement and continuous improvement – the moderating effect of a common improvement method. *Production Planning & Control, 32*(2), 132-144. https://doi.org/10.1080/09537287.2020.1716405

Van der Heijden, B. I., Davies, E. M., Van der Linden, D., Bozionelos, N., & De Vos, A. (2022). The relationship between career commitment and career success among university staff: The mediating role of employability. *European Management Review, 19*(4), 564-580. https://doi.org/10.1111/emre.12503

van Esch, E., Wei, L. Q., & Chiang, F. F. T. (2016). High-performance human resource practices and firm performance: the mediating role of employees' competencies and the moderating role of climate for creativity. *The International Journal of Human Resource Management, 29*(10), 1683–1708. https://doi.org/10.1080/09585192.2016.1206031

van Teijlingen, E., & Hundley, V. (2002). The importance of pilot studies. *Nursing standard (Royal College of Nursing (Great Britain): 1987), 16*(40), 33–36. https://doi.org/10.7748/ns2002.06.16.40.33.c3214

Van Zyl, L. E., Van Vuuren, H. A., Roll, L. C., & Stander, M. W. (2022). Person-environment fit and task performance: Exploring the role(s) of grit as a personal resource. *Current Psychology, 42*(27), 23560-23579. https://doi.org/10.1007/s12144-022-03461-9

Walker, A., & Derbyshire, P. (2020). The role of HRD in developing capabilities for creativity and innovation at work: A multilevel approach. *The Future of HRD, 1*, 115-141. https://doi.org/10.1007/978-3-030-52410-4_5

Wan, C. D. (2022). *Overworked academics quitting their jobs*. [online] Available at: https://www.nst.com.my/opinion/letters/2022/08/818566/overworked-academics-quitting-their-jobs [Accessed on 18 December 2024]

Wang, X., & Cheng, Z. (2020). Cross-Sectional Studies: Strengths, Weaknesses, and Recommendations. *Chest, 158*(1), S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

Wardiansyah, D. R., Indrawati, N. K., & Kurniawati, D. T. (2024). The effect of employee motivation and employee engagement on job performance mediated by job satisfaction. *International Journal of Research in Business and Social Science (2147-4478), 13*(1), 220-231. https://doi.org/10.20525/ijrbs.v13i1.3133

Weijters B., Cabooter E., Schillewaert N. (2010). The effect of rating scale format in response styles: The number of response categories and response category labels. *International Journal of Research in Marketing, 27*, 236-247.

Weiner, I. B., Schmitt, N. W., & Highhouse, S. (2013). *Handbook of psychology, industrial and organizational psychology* (2nd ed.). John Wiley & Sons.

Widi, Y. L., & Kusuma, K. A. (2023). Employee performance: Career development, motivation, and workplace environment impact. *Academia Open, 9*(1), 6-17. https://doi.org/10.21070/acopen.9.2024.5706

Wilhelm, F., & Hirschi, A. (2019). Career self-management as a key factor for career wellbeing. *Theory, Research and Dynamics of Career Wellbeing*, 117-137. https://doi.org/10.1007/978-3-030-28180-9_6

Williams, A. (2003). How to Write and Analyse a Questionnaire. *Journal of Orthodontics, 30*, 245-252. http://dx.doi.org/10.1093/ortho/30.3.245

Williams, C. (2011). Research methods. *Journal of Business & Economics Research (JBER), 5*(3), 65-72. https://doi.org/10.19030/jber.v5i3.2532

Willis, G. B. (2004). *Cognitive interviewing: A tool for improving questionnaire design*. Sage Publications.

Wulantika, L., & Ayuningtias, N. (2020). Effect of career planning and self-efficacy of the performance of employees. *Proceedings of the International Conference on Business, Economic, Social Science, and Humanities – Economics, Business and Management Track (ICOBEST-EBM 2019), 112,* 100-103. https://doi.org/10.2991/aebmr.k.200108.024

Xu, Y., & Zhang, M. (2022). The study of the impact of empowering leadership on adaptive performance of faculties based on chain mediating. *Frontiers in Psychology, 13,* 938951. https://doi.org/10.3389/fpsyg.2022.938951

Yaacob, N., Yeon, A. L., & Rahman, R. A. (2018). Workload of academic staff in Malaysian public University: Perspectives of top management. *The European Proceedings of Social and Behavioural Sciences*, 873-883. https://doi.org/10.15405/epsbs.2018.12.03.89

Yadav, M., Bhakar, S., & Upadhyay, Y. (2022). Impact of HR practices on employee engagement and employee performance with special reference to academicians and work professionals. *International Journal of Health Sciences*, *6*(S3), 5443–5456. https://doi.org/10.53730/ijhs.v6nS3.7144

Yaghmaie, F. (2003). Content validity and its estimation. *Journal of medical education*, *3*(1), 25-27.

Yakubu, I., & Majeed, M. (2018). Job Rotation and Performance of Technical University Administrative Staff. *Journal of Marketing and Consumer Research, 50*, 32-38.

Yamin, M. A. Y. (2020). Examining the effect of organisational innovation on employee creativity and firm performance: moderating role of knowledge sharing between employee creativity and employee performance. *International Journal of Business Innovation and Research*, *22*(3), 447-467.

Yang, H., Kao, Y., & Huang, Y. (2006). The job self-efficacy and job involvement of clinical nursing teachers. *Journal of Nursing Research, 14*(3), 237-249. https://doi.org/10.1097/01.jnr.0000387582.81845.57

Yusuf, M. (2024). The influence of job involvement and locus of control on employee performance with self-efficacy as a mediation variable. *International Journal of Social Health, 3*(2), 109-117. https://doi.org/10.58860/ijsh.v3i2.155

Yusnita, N. (2021). Does self-efficacy play an intervening role? Studying between organizational climate and job involvement. *Journal of Humanities and Social Studies, 5*(1), 44 - 49. https://doi.org/10.33751/jhss.v5i1.3207

Yusof, M. A. M., Zainudin, M. Z., Rawi, A. H. M., & Isa, M. F. M. (2023). Impact Of Job Rotation on Employee Performance Through Job Satisfaction in The Public Civil Service Melaka. *Journal of Human Capital Development (JHCD), 16*(1), 1-11.

Yusuf, M. (2024). The influence of job involvement and locus of control on employee performance with self-efficacy as a mediation variable. *International Journal of Social Health, 3*(2), 109-117. https://doi.org/10.58860/ijsh.v3i2.155

Zaidi, S. Q. (2022). Empirical evidence on role of self-efficacy upon commitment of teachers in higher education institutions. *Administrative and Management Sciences Journal, 1*(1), 10-24. https://doi.org/10.59365/amsj.1(1).2022.7

Zakaria, A. F., Hanapi, z., Mustafa, M. S., & Ma'arof, M. I. (2022). Exploring Predictors of Development and Career Planning Among TVET Educators. *Journal of Technical*

Education and Training, 14(2), 156-164. https://doi.org/10.30880/jtet.2022.14.02.014

Zaki, W., Ali, A., Bakar, A., & Sarwar, B. (2019). Role of self-efficacy in the relationship of training and employee performance. *Paradigms, 13*(1), 67-74

Zamiri, A., Heidari, A., Askari, P., & Makvandi, B. (2020). Effect of organizational intelligence, workplace-life skills, and employee empowerment training on promoting organizational productivity and socialization among employees with job stress. *Archives of Hygiene Sciences, 9*(1), 58-68. https://doi.org/10.29252/archhygsci.9.1.58

Zhao, T., & Wu, J. (2022). How do career development courses help Chinese undergraduate students achieve healthy and quality career development? *International Journal of Environmental Research and Public Health, 19*(23), 15620. https://doi.org/10.3390/ijerph192315620

Zhao, X., & Namasivayam, K. (2009). Posttraining Self-Efficacy, Job Involvement, and Training Effectiveness in the Hospitality Industry. *Journal of Human Resources in Hospitality & Tourism, 8*(2), 137–152. https://doi.org/10.1080/15332840802269767

Zhao, Y., Peng, X., Liu, Z., Song, S., & Hansen, P. (2020). Factors that affect asker's pay intention in trilateral payment-based social Q&A platforms: From a benefit and cost perspective. *Journal of the Association for Information Science and Technology, 71*(5), 516–528. https://doi.org/10.1002/asi.24262

Zikmund, W. G., Carr, J. C., & Griffin, M. (2013). *Business Research Methods (Book Only)*: Cengage Learning.

APPENDICES

Appendix A: Questionnaire

Human Resource Management Practices, Employee Performance and the Mediating Role of Self-Efficacy in Sarawak Private Higher Education Institutions

Dear all respondents,

This present study is intended to examining human resource management (HR) practices and employee performance with the mediating role of self-efficacy in the context of private higher education institutions (PHEIs) in Sarawak.

All information provided is entirely for the purpose of this research and information obtained will be kept confidentially. Your kind participation and assistance are highly appreciated in making this study a success.

For any questions or concerns, please do not hesitate to contact me. Thank you for your time and invaluable contribution.

Yours sincerely,

Voon Boo Khoon, Owen
Matric Number: 21040055
Doctor of Business Administration Candidate
Faculty of Economics and Business
Universiti Malaysia Sarawak
Email: owenvoonbk@gmail.com
Contact: +6016-8947498

Research Supervisor:

Associate Professor Dr. Helen Tan Sui Hong
Faculty of Economics and Business
Universiti Malaysia Sarawak
Email: tshhelen@unimas.my
Contact: +6012-7600495/ +6082-584262

SECTION A: DEMOGRAPHIC INFORMATION

Please select in the most appropriate response box or closest to the answer.

- The primary objective of this section (Section A) is **to know the general profile of the respondent**.

"ALL INFORMATION WILL BE PURELY USE FOR RESEARCH PURPOSES ONLY."

1. Location of Institution

☐ Kuching
☐ Miri
☐ Sibu
☐ Bintulu

2. Staff Category

☐ Academic Staff
☐ Non-Academic Staff

3. Gender

☐ Male
☐ Female

4. Age

☐ 21 to 30 years old
☐ 31 to 40 years old
☐ 41 to 50 years old
☐ 51 to 60 years above
☐ 61 years and above

5. Marital status

- [ ] Single
- [ ] Married
- [ ] Widowed
- [ ] Divorce

6. Race/ Ethnicity

- [ ] Chinese
- [ ] Malay
- [ ] Iban
- [ ] Bidayuh
- [ ] Others

7. Highest Education Attained

- [ ] High school or below
- [ ] Certificate/ Diploma/ Foundation
- [ ] Degree or Professional
- [ ] Master
- [ ] PhD

8. Number of years with present organization

- [ ] Less than a year
- [ ] 1 – 5 years
- [ ] 6 – 10 years
- [ ] 11 – 15 years
- [ ] 16 years and above

SECTION B: HUMAN RESOURCE MANAGEMENT (HR) PRACTICES

Please select the practices that are most relevant with your behavioral with reference to the following scale:

5 - Strongly Agree (SA)
4 - Agree (A)
3 - Neutral (N)
2 - Disagree (D)
1 - Strongly Disagree (SD)

- The primary objective of this section is to **understand the factors that influences employee performance of private higher education institutions (PHEIs) in Sarawak**.

"ALL INFORMATION WILL BE PURELY USE FOR RESEARCH PURPOSES ONLY. "

No.	Human Resource Management Practices	SD	D	N	A	SA
	Training and Development					
1.	I regularly participate in training programmes provided by my institution.	1	2	3	4	5
2.	My institution periodically assesses the effectiveness of training programmes for employees.	1	2	3	4	5
3.	Training and development are crucial for my academic and professional growth.	1	2	3	4	5
4.	Training and development are important for my career advancement.	1	2	3	4	5
5.	The training programmes are conducted by professionals and experienced trainers.	1	2	3	4	5
	Job Rotation					
1.	Job rotation broadens my knowledge and skills in other fields, contributing to my professional growth in higher education.	1	2	3	4	5
2.	Job rotation helps to enhance my performance.	1	2	3	4	5
3.	I accumulate a lot of experience through job rotation, which enhances my performance.	1	2	3	4	5
4.	Job rotation improves my job stability and contributes to my professional development.	1	2	3	4	5
5.	Job rotation achieves effective results in my institution, enhancing employee performance.	1	2	3	4	5
	Career Planning					
1.	I have a clear career path within the institution that aligns with my aspirations.	1	2	3	4	5

2.	I have set key goals for my development areas in the short term (next 12-month period), which helps improve my performance.	1	2	3	4	5
3.	My institution prefers to promote internal employees when a vacancy occurs.	1	2	3	4	5
4.	My institution promotes staff based on merit, enhancing my self-efficacy to perform at my best.	1	2	3	4	5
5.	My personal growth needs are aligned with the institution's growth needs, contributing to my overall performance.	1	2	3	4	5
	Job Involvement					
1.	The most important things that happen to me involve my work.	1	2	3	4	5
2.	I am very much involved personally in my work.	1	2	3	4	5
3.	In my department, we collaborate to establish the standards that define quality work.	1	2	3	4	5
4.	I have the opportunity to influence the department's goals or actions.	1	2	3	4	5
5.	All members of my department are involved in important decisions that impact them.	1	2	3	4	5

SECTION C: SELF-EFFICACY

Please select the practices that are most relevant with your behavioral with reference to the following scale:

5 - Strongly Agree (SA)
4 - Agree (A)
3 - Neutral (N)
2 - Disagree (D)
1 - Strongly Disagree (SD)

- The primary objective of this section is to **understand the factors that influences employee performance of private higher education institutions (PHEIs) in Sarawak**.

"ALL INFORMATION WILL BE PURELY USE FOR RESEARCH PURPOSES ONLY. "

No.	Self-Efficacy	SD	D	N	A	SA
1.	I have the capability suitable for my assigned responsibilities.	1	2	3	4	5
2.	I am confident that my capabilities are equal to those of my colleagues and will surpass them in the future.	1	2	3	4	5
3.	I can manage difficult tasks or challenges effectively.	1	2	3	4	5
4.	I am confident contributing to discussions about the institution’s strategy.	1	2	3	4	5
5.	I am confident helping to set targets and goals in my department.	1	2	3	4	5

SECTION D: EMPLOYEE PERFORMANCE

Please select the practices that are most relevant with your behavioral with reference to the following scale:

5 - Strongly Agree (SA)
4 - Agree (A)
3 - Neutral (N)
2 - Disagree (D)
1 - Strongly Disagree (SD)

- The primary objective of this section is to **understand the factors that influences employee performance of private higher education institutions (PHEIs) in Sarawak**.

"ALL INFORMATION WILL BE PURELY USE FOR RESEARCH PURPOSES ONLY. "

No.	Employee Performance	SD	D	N	A	SA
1.	I effectively plan my tasks to ensure they are completed on time.	1	2	3	4	5
2.	I focus on achieving the desired outcomes of my work.	1	2	3	4	5
3.	I take the initiative to solve problems as they arise.	1	2	3	4	5
4.	I embrace challenging work tasks when they are available.	1	2	3	4	5
5.	I am able to cope well with difficult situations and setbacks at work.	1	2	3	4	5
6.	I am able to cope well with uncertain and unpredictable situations at work.	1	2	3	4	5

SECTION E (OPTIONAL)

Highlight the TOP three (3) factors that greatly improve your work performance:

-
-
-

Thank you for completing this survey.

All information provided by the respondents participated in this questionnaire survey will be handled as private and confidential, and hence, will be held with due care. All information will be only use for research purposes only, no personal/ private information is required from this survey.

Appendix B: Letter for Data Collection

Fakulti Ekonomi dan Perniagaan
Faculty of Economics and Business
Dekan/ *Dean*

UNIMAS/NC-22/04-18 Jld.4 (38)

10 Julai 2024

KEPADA YANG BERKENAAN

Tuan/Puan,

Permohonan untuk Menjalankan Kaji Selidik bagi Pelajar Program *Doctoral of Business Administration (DBA)* di Fakulti Ekonomi dan Perniagaan, UNIMAS

Dengan segala hormatnya dimaklumkan bahawa pelajar Program *Doctoral of Business Administration (DBA)* memohon untuk menjalankan kaji selidik dengan pihak tuan/puan untuk Kursus *Dissertation II*, EBD81516.

Pelajar ini telah diperjelaskan mengenai tanggungjawab mereka untuk mendapatkan keizinan serta menyimpan semua maklumat yang dianggap sulit dan memastikan bahawa peserta tidak dikenalpasti di dalam sebarang laporan kaji selidik.

Berikut adalah maklumat penyelidikan pelajar berkenaan:

Tajuk Penyelidikan : *Human Resource Management Practices, Employee Performance and the Mediating Role of Self-Efficacy in Sarawak Private Higher Education Institutions*
Nama Pelajar : Voon Boo Khon (Matrik No.21040055)
Nama Penyelia : Prof Madya Dr. Helen Tan Sui Hong

Sekiranya ada pertanyaan lanjut, boleh hubungi penyelia pelajar iaitu **Prof Madya Dr Helen Tan Sui Hong** di talian **+60 12-760 0495** atau emel **tshhelen@unimas.my.**

Sukacita sekiranya pihak tuan/puan dapat memberi kerjasama kepada pelajar berkenaan.

Sekian, harap maklum dan terima kasih.

Yang benar

Profesor Dr Rossazana Ab Rahim
Dekan

MSC-Status

94300 Kota Samarahan, Sarawak, MALAYSIA | Tel + 60 82 584 455 | Fax + 60 82 583 999

www.unimas.my